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TECHNICAL REPORT

Developing a Prototype Handbook for Monitoring and Evaluating Department of Defense Humanitarian Assistance Projects

Marla C. Haims, Melinda Moore,
Harold D. Green, Jr., Cynthia Clapp-Wincek

Prepared for the Office of the Secretary of Defense

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A JOINT ENDEAVOR OF RAND HEALTH AND THE
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Preface

In early 2008, the Office of the Deputy Assistant Secretary of Defense for Partnership Strategy and Stability Operations asked the RAND Corporation to develop a handbook to support the monitoring and evaluation (M&E) of humanitarian assistance (HA) projects funded by Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) appropriations. This report describes the process undertaken by the RAND research team and contains a prototype version of the handbook. This report and, in particular, the prototype handbook should be of interest to U.S. Department of Defense (DoD) staff responsible for HA project planning, execution, and monitoring and those in the military chain of command who are interested in higher-order program or strategic evaluations that draw from project assessments. It should also be of interest to civilian agencies that interact with DoD counterparts in the planning or follow-up to DoD HA projects in the field and to members of Congress and their staffs, as evolving policies and requirements related to M&E in DoD derive in large part from statutory requirements.

This research was sponsored by the Office of the Deputy Assistant Secretary of Defense for Partnership Strategy and Stability Operations and conducted jointly by RAND Health's Center for Military Health Policy Research and the International Security and Defense Policy Center of the RAND National Defense Research Institute (NDRI). The Center for Military Health Policy Research taps RAND expertise in both defense and health policy to conduct research for the Department of Defense, the Veterans Administration, and nonprofit organizations. RAND Health aims to transform the well-being of all people by solving complex problems in health and health care. NDRI is a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the Unified Combatant Commands, the Navy, the Marine Corps, the defense agencies, and the defense Intelligence Community.

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Summary

The impetus for the development of a handbook to guide the assessment of military humanitarian assistance (HA) projects came from a January 2008 workshop with combatant command (COCOM) HA managers, “Monitoring and Evaluation of DoD Humanitarian Assistance Programs.” Participants felt that a user-friendly handbook to clarify overall monitoring and evaluation (M&E) concepts and to facilitate project assessment would be particularly valuable to those responsible for overseeing the execution of HA projects in the field. Recent policy guidance and the development of this handbook are part of an increased emphasis on assessment across the U.S. Department of Defense (DoD).

Developing the Handbook

The project team took a broad and systematic approach to developing and refining the prototype handbook, which is included as an appendix to this report. To develop the initial draft of the handbook, we first reviewed published reports from various government, nongovernment, and academic sources to better understand different approaches to project assessment. Second, we searched the Overseas Humanitarian Assistance Shared Information System (OHASIS) database to gain a better understanding of existing and proposed Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) HA projects. Finally, we conducted semistructured interviews, first with COCOM HA managers and then with others, to elicit views on perceived opportunities and concerns related to the assessment of HA projects.

Our interviews suggested that the handbook should include both an educational component—a primer on M&E—and a step-by-step user’s guide for conducting project assessment activities. The primer was developed to provide those tasked with project assessment with a concise, yet comprehensive, introduction to M&E terminology, concepts, and approaches, with an emphasis on the ability to coordinate and communicate with civilian agencies. The user’s guide was developed to walk users through the concrete steps of project-level assessment—from HA project conception and planning to project execution and monitoring for progress and results.

After we completed the first full draft of the handbook in December 2008, we asked stakeholders in DoD as well as experts from the U.S. Agency for International Development (USAID) and the U.S. Department of State’s Bureau of Population, Refugees, and Migration to review the draft and provide written feedback. As another avenue of feedback intended to inform revision of the first draft handbook, we sought at least one or two countries where it

could be field-tested. Ultimately, DoD HA staff in Albania and Morocco agreed to carry out the pilot tests.

Overall, stakeholders who reviewed the handbook felt that it represented a strong contribution to the M&E literature, not only for DoD but also for the larger international development community. These reviewers provided important feedback that informed our subsequent revisions. Those who pilot-tested the handbook in Albania and Morocco felt that it was a valuable resource aimed at the appropriate level for those conducting field-level HA project assessments. They provided useful comments regarding ways to streamline and simplify the document.

We revised the handbook based on the constructive feedback provided through the review and pilot-testing processes.

Discussion and Recommendations

Although we received extensive and valuable feedback from reviews of the initial draft, pilot-testing was limited to two countries, a small number of projects, and a relatively short time frame. Thus, several aspects of the handbook's use could not be tested, including its use across *all* types of HA projects, its use over time (particularly when a project is handed off from one team to another), and the feasibility and usefulness of compiling data from many individual projects to inform higher-level assessments. Because of the limited pilot testing to date, **we recommend that the prototype handbook undergo further testing, if possible, before it is broadly used.**

Most staff responsible for HA projects are currently not undertaking any project assessment activities, including fulfilling the existing requirement to complete an after-action report, so the perception is that any project assessment activity will add burden. It is hoped, however, that the assessment approach outlined in the prototype handbook will actually reduce the burden on staff after an initial period of uptake and adjustment. However, the potential for reduced burden—both real and perceived—will be contingent on DoD both formally requiring HA project assessment and enforcing that requirement. **DoD should explicitly require HA project assessment and enforce this requirement** (e.g., new project nominations should not be accepted unless assessment requirements from previous projects are met).

The level of burden related to conducting project assessment activities will also depend on the way in which data are captured and stored. To reduce the burden of HA project-level assessment and to allow generated data to be compiled to inform higher-level assessments, **the collection of project assessment information as outlined in the prototype handbook should be incorporated within current and future efforts to upgrade and improve the OHASIS database.**

Without information captured in OHASIS or another similar system, project-level assessments will be of limited use. DoD will need to decide whether it will begin to require project-level assessment using the handbook before this retrofitting of OHASIS is complete or whether it would prefer to wait until the system is redesigned to support assessment activities. While starting sooner may be beneficial from the perspective of training and instilling best practices in project management, the potential for perceived additional burden and limited usefulness is higher without the systems support that would be provided by a redesigned OHASIS database. To the extent that funds are available, **the capture of HA project assessment information**

as outlined in the handbook should be incorporated into OHASIS before HA project assessment is required.

Although there are several different handbook formats that could be tested in an additional round of pilot tests, based on the feedback that we received, **we recommend a letter-sized, spiral-bound handbook with a flexible protective cover and a CD insert that includes an electronic version of the handbook and all handbook worksheets.**

It is hoped that a final handbook, though designed with a specific focus in mind, will be used more broadly over time by DoD and potentially beyond. To support its sustainable use by DoD, in particular, **the handbook should be incorporated into the formal DoD handbook series.**

Prototype Handbook

The prototype handbook is presented as an appendix to this report. It includes three major parts: an introduction, an M&E primer, and a step-by-step user's guide for project assessment. The M&E primer educates handbook users on basic M&E concepts and terms (including those that go beyond the scope of project-level assessment), how to plan for project assessment, and the appropriate use of indicators in various types of project assessment. The user's guide presents 11 project assessment steps and includes various worksheets to facilitate assessment planning and data collection. In addition, the prototype handbook includes its own table of contents and appendixes with supplemental information on community consultation and avoiding bias in project assessment, as well as a glossary of M&E terms.

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Abbreviations

COCOM	combatant command
DoD	U.S. Department of Defense
DSCA	Defense Security Cooperation Agency
FY	fiscal year
GEF	Guidance for the Employment of the Force
HA	humanitarian assistance
M&E	monitoring and evaluation
MEASURE	Monitoring and Evaluation to Assess and Use Results
NDRI	RAND National Defense Research Institute
OHASIS	Overseas Humanitarian Assistance Shared Information System
OHDACA	Overseas Humanitarian, Disaster, and Civic Aid
OSD	Office of the Secretary of Defense
PRM	Bureau of Population, Refugees, and Migration, U.S. Department of State
SDA	senior development adviser
USAFRICOM	U.S. Africa Command
USAID	U.S. Agency for International Development
USEUCOM	U.S. European Command
USNORTHCOM	U.S. Northern Command
USPACOM	U.S. Pacific Command

Introduction

Background

The impetus for the development of a handbook to guide the assessment of military humanitarian assistance (HA) projects came from a January 2008 workshop with combatant command (COCOM) HA managers, “Monitoring and Evaluation of DoD Humanitarian Assistance Programs.” The workshop provided a forum in which to discuss and better understand basic monitoring and evaluation (M&E) concepts, recent policy guidance requiring the measurement of HA project effectiveness, and future expectations with regard to project assessment. Participants felt that a user-friendly handbook to clarify M&E concepts and to facilitate project assessment would be particularly valuable to those responsible for overseeing the execution of HA projects in the field.

To help ensure that the goals and objectives of its HA missions are met, the U.S. Department of Defense (DoD) has included M&E requirements and resources in its Policy Guidance for Overseas Humanitarian Assistance. The fiscal year (FY) 2008 guidance included requirements for ensuring that projects are sustainable, for coordinating with other relevant agencies and stakeholders, and for measuring project effectiveness.¹ The FY 2010 guidance explicitly noted that “metrics are essential for measuring achievement,” “project effectiveness should be considered,” and the “development and application of specific HA metrics is pending establishment of a funding source for the collection of metrics,” with further guidance to follow.²

The FY 2008 guidance notes that the Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) program falls under the joint oversight of the Deputy Assistant Secretary of Defense for Partnership Strategy and Stability Operations and the Defense Security Cooperation Agency (DSCA), and, as such, should strive to achieve such security cooperation objectives as “improving DoD visibility, access, and influence in a partner nation or region, generating long-term public relations and goodwill for DoD, and promoting interoperability and coalition-building with foreign military and civilian counterparts.”³ The guidance further emphasizes capacity-building (i.e., the transfer of knowledge and skills to the host nation), sustainability, and interagency coordination as vital to HA projects.

DoD policy guidance and the development of this handbook are part of an increased emphasis on assessment across the department. DoD is placing greater emphasis on assessing

¹ U.S. Department of Defense, *Policy Guidance for FY08 Overseas Humanitarian Assistance*, September 19, 2007.

² U.S. Department of Defense, *Policy Guidance for DoD Overseas Humanitarian Assistance Program (HAP) FY 2010*, Washington, D.C., November 18, 2009.

³ U.S. Department of Defense, 2007.

progress toward strategic goals to better inform future priorities, planning, requirements, and resource allocation. For example, the Guidance for the Employment of the Force (GEF) is a guidance document from the Office of the Secretary of Defense (OSD) that defines functional and theater strategic “end states” and requires an assessment of progress toward achieving these end states. Relevant to HA project assessment, the GEF focuses on building partner capacity in the context of security cooperation programming and calls for assessments to build up from local-level (project) outputs to strategic-level goals.

Project Goal and Objective

The goal of this project was to develop an educational and practical tool to support an expected requirement that OHDACA-funded HA projects be monitored and evaluated and to support the larger push for assessment DoD-wide. The primer was developed to educate novice users on basic M&E concepts and terms, including topic areas that go beyond basic project-level assessment (e.g., evaluating the effects of a collection of projects, or program evaluation). Knowledge obtained from the primer should assist users in planning for and conducting project assessments; it will also provide a broader understanding of M&E concepts, terms, and methods, which should foster communication and collaboration with civilian counterparts.

The user’s guide is aimed at “walking” users, with knowledge from the primer in hand, through each of the steps required for project assessment (defined here as monitoring project inputs, processes, outputs, and outcomes, but not necessarily evaluating why or how results occur). The objective was to develop a guide and associated tools to generate information that would be useful to both the specific project team and those higher in the chain of command. That is, application of the user’s guide should produce information that is useful for assessing project-level performance and effectiveness as well as information that can inform higher-level program assessments aimed at evaluating progress toward achieving higher-order DoD objectives.

The prototype handbook, included as an appendix to this report, incorporates feedback from key stakeholders and two pilot tests of an earlier draft in the field. Ideally, it should be more rigorously field-tested and revised again based on those tests before it is used operationally by DoD. The handbook is intended for use by those responsible for planning and executing HA projects and generating project-level assessment data, especially DoD country-level staff and COCOM HA managers. These users (likely, civil affairs personnel) might already be overburdened and, while involved in development activities, may not be M&E experts. The information generated through the use of the handbook will also be of interest to others in the DoD chain of command, particularly those with an interest in project-level assessment data as they relate to higher-order (strategic) objectives—for example, the COCOM commander, DSCA, and others.

Although the prototype handbook included here focuses on assessment of OHDACA-funded HA projects and is intended primarily for use by those responsible for executing OHDACA projects, a final handbook may be useful for similar or related DoD efforts through the Humanitarian Civic Assistance, Denton and Funded Transportation, Foreign Disaster Relief, and Humanitarian Assistance Excess Property programs and, potentially, to users beyond DoD, such as those working on projects supported by the U.S. Agency for International Development (USAID).

Organization of This Report

The remainder of this report provides information on the approach used for developing and refining the prototype handbook, the results from each phase of our work, and a brief discussion of remaining issues and recommendations for finalizing and ultimately using the handbook. The prototype handbook itself is included as an appendix. It consists of three major parts: an introduction, an M&E primer, and a step-by-step user's guide for project assessment.

Developing the Handbook

Study Approach

The project team took a broad and systematic approach to developing and refining the prototype handbook included in this report.

To develop the initial draft of the handbook, we first reviewed published reports from various government, nongovernment, and academic sources to better understand different approaches to project assessment. Specifically, we reviewed documents published by DoD; USAID; the U.S. Department of State's Bureau of Population, Refugees, and Migration (PRM); the World Bank; the United Nations Development Programme; the Sphere Project; and the USAID-funded MEASURE (Monitoring and Evaluation to Assess and Use Results) program. Important sources of information can be found in the references section of the prototype handbook. As part of this exercise, we conducted a comprehensive review of assessment terms, methods, and data sources that are used by DoD and other relevant organizations. The primary goal of the literature review was to compare military and civilian approaches to project assessment and to determine how to link them. A key task was to compare assessment terms and definitions and to establish consistent terminology for the handbook to facilitate DoD coordination and communication on assessment with other U.S. government agencies, while at the same time retaining language embedded in DoD policy and doctrine.

Second, we searched the Overseas Humanitarian Assistance Shared Information System (OHASIS) database to gain a better understanding of existing and proposed OHDACA HA projects, including project descriptions, budgets, timelines, locations, and primary activities. The analyses provided the basis for a simple typology of HA projects for use in the handbook's development and subsequent pilot-testing activities.

Third, we conducted semistructured interviews, first with COCOM HA managers and then with others, to elicit views on perceived opportunities and concerns related to the assessment of HA projects. We conducted approximately 15 interviews with key staff from OSD, DSCA, the COCOMs (U.S. Africa Command [USAFRICOM], U.S. European Command [USEUCOM], U.S. Pacific Command [USPACOM], and U.S. Northern Command [USNORTHCOM]), and country-level DoD offices (in Moldova, the Philippines, Senegal, and Ukraine). At the COCOMs, we interviewed HA managers and COCOM assessment leaders. At the country level, we interviewed Office of Defense Cooperation chiefs and local team members who could potentially pilot the handbook on the ground. The goal of these interviews was to determine what HA activities were currently being conducted, which assessment-related skills these relevant DoD staff might already have, and what types of infor-

mation would be most applicable for those using the handbook—both at the project level and among those interested in compiling project-level data to inform broader evaluations.

The semistructured interviews consisted of overview questions about HA and related activities, including sources of funding and timelines; the process of project nomination, approval, and funding; the types of projects currently funded and those that HA managers might like to see funded in the future; how the HA project cycle compares to other international development project cycles; parties responsible for collecting, analyzing, and using HA assessment information; the characteristics of those in the field who will be designing and implementing project assessment plans, including their skill levels; views on the benefits of assessment information for current and future projects; how the process of M&E data collection and information-sharing might be made easier and more streamlined; how assessment information is actually used up the chain of command and by whom; and information about project resources and capacities for project assessment.

Developing the First Draft of the Handbook

Our interviews confirmed that the handbook should include both an educational component—a primer on M&E—and a step-by-step user's guide for conducting narrower project assessment activities. The primer was developed to provide those tasked with project assessment with a concise, yet comprehensive, introduction to M&E terminology, concepts, and approaches, with an emphasis on the ability to coordinate and communicate with civilian agencies. While the prototype handbook is based on DoD M&E or assessment terms, we paid special attention to the linking of military and civilian terminology in the primer to facilitate interagency coordination on the ground. The user's guide was developed to walk users through the concrete steps of project-level assessment—from HA project conception and planning to project execution and monitoring for progress and results. In principle, the user's guide and the primer can each stand alone. Those already experienced with M&E or assessment can go directly to the user's guide and begin project assessment work, while those who need an introduction or a more detailed orientation can consult some or all of the primer.

We developed the prototype handbook according to a set of usability criteria established at the outset of the project and confirmed during our interviews with stakeholders. The handbook is intended to be

- *user-friendly*—approachable and easy to use from the end user's standpoint
- *useful*—focused on the most practical elements of M&E that will be most useful to the end user as well as to stakeholders up the command chain
- *focused on priorities*—grounded by DoD's strategic objectives and explicit HA program goals
- *succinct*—as brief and to-the-point as possible, without losing key information
- *organized*—taking into account the structure of guidebooks from other agencies and organizations
- *compatible within DoD*—compatible with existing DoD M&E or assessment doctrine, policy, frameworks, tools, metrics, and definitions

- *compatible with other key agencies*—compatible with M&E terminology, methods, and metrics used by key agencies, such as USAID, the U.S. Department of State, and large international and nongovernmental organizations
- *generalizable*—applicable to non-OHDACA and non-DoD projects by drawing on widely used M&E frameworks from civilian programs, such as the Sphere Project and USAID’s MEASURE project
- *attributable*—performance measures based on frameworks that help establish causal pathways and, thus, reflect results that are likely attributable to project activities.

Review and Feedback from Key Stakeholders

After we completed the first full draft of the handbook in December 2008, we asked stakeholders in DoD (including several who were interviewed earlier) and experts from USAID and PRM to review the draft and provide written feedback. In January 2009, through OSD, we distributed the handbook for comment to a selected group of approximately 20 people, including DSCA staff, COCOM HA managers, staff from the Office of the Assistant Secretary of Defense for Health Affairs, staff from USAID (including its senior development advisers [SDAs] at the COCOMs), and staff from PRM.

Pilot-Testing in the Field

As another avenue for feedback intended to inform the revision of the first draft of the handbook, we sought at least one or two countries where it could be field-tested. Ideally, these tests would address projects that fall into one of the main types of HA projects and cover different phases of the project cycle (e.g., planning, execution, post-completion). We contacted country team members in 11 countries across USAFRICOM (Senegal, Kenya, Morocco, Zimbabwe, Angola, Botswana, and Liberia), USEUCOM (Moldova, Albania, and Ukraine), and USPACOM (Philippines) about the possibility of field-testing the handbook. Ultimately, staff in Albania and Morocco agreed to carry out the pilot tests. To assess the practical utility of the handbook based on just a small number of field tests, we aimed to gather pilot-test information on more than one project per country—similar projects at different points in the project cycle. We provided staff in these two countries with materials to introduce and orient them to the handbook, conducted a “kick-off” telephone meeting, and made ourselves available to the field teams for any technical or logistical questions that might arise as they applied the handbook to planning and monitoring projects in their respective countries. We asked them to complete a general feedback form to rate and provide comments on the content, organization, format, clarity, and expected utility of the handbook. We also asked them to submit relevant worksheets (i.e., the “objective tree” template or other relevant indicator worksheets) from the user’s guide that they used to monitor their projects and to comment on the usability of those particular components. The process of seeking sites for pilot-testing began in March 2009, and the two pilot tests were completed by October 2009.

Revising the Handbook

We revised the handbook based on written comments from key stakeholders as well as written and oral comments from the country team staff leading the pilot tests in Morocco and Albania. We considered all suggestions and comments, particularly those associated with improv-

ing the utility of the handbook in the field, especially if they came from those who pilot-tested it in the field. The reviews underwent three independent readings to determine key action points. Responses to each action point were developed collaboratively by the RAND team. The following section describes the first draft of the handbook, key comments received from the reviews and pilot-testing, and the major changes made to the prototype handbook.

Results

Eleven representatives from DoD (staff from OSD's Office of Partnership Strategy, staff from the Office of the Assistant Secretary of Defense for Health Affairs, and COCOM HA managers), USAID, and PRM provided feedback on the draft handbook. We received comments from four of the six COCOM HA managers and two of the five USAID SDAs at the COCOMs. Overall, the reviewers felt that the handbook itself represented a strong contribution to the M&E literature, not only for DoD but also for the larger international development community. One representative from USAID found the handbook to be "one of the most comprehensive and concise overviews of M&E" ever seen, further stating that USAID was interested in using it for training because it "is clear in its explanations, builds in a logical order, and covers numerous aspects of both understanding and implementing good M&E." Reviewers provided important feedback on the content and sequencing of the handbook, the scenario used to illustrate the assessment process, and the potential burden associated with implementing assessment activities.

Despite the notable enthusiasm expressed by most country team representatives contacted to field-test the handbook, we received feedback from only two of the 11 country teams (Albania and Morocco). Each field-tester provided ratings and written comments on the handbook, focusing on content and ease of use, using the feedback form we provided. In one case, we also received examples of completed indicator worksheets, which helped us understand how they could be improved to facilitate their use. We received further comments during post-pilot phone calls, which also contributed to handbook revisions. In Albania, the local HA project manager felt that the handbook was a valuable resource aimed at the appropriate level for those conducting field-level project assessments. In particular, he felt that the forms and checklists for planning and data collection were very valuable, as was the ability for each section of the handbook (i.e., the primer and user's guide) to stand alone. In Morocco, the civil affairs officer who field-tested the handbook was experienced with M&E concepts and found the indicator worksheets easy to use; he suggested simplifications to make them clearer and less repetitive. In both the Morocco and Albania pilot tests, handbook users considered the project assessment as a task in addition to existing HA project requirements—as opposed to an integral part of their work.

The prototype handbook reflects revisions based on the constructive feedback provided through the review and pilot-testing processes described here.

Discussion and Recommendations

As we developed the handbook, we sought to ensure that it was user-friendly and useful to those who would be required to implement it, focused on DoD priorities, succinct, well orga-

nized, compatible within DoD, compatible with key civilian agencies, generalizable beyond OHACA and DoD, and helpful in linking HA projects to specific project- and strategic-level outcomes. Although we received extensive and valuable feedback from reviews of the initial draft, pilot-testing was limited to two countries, a small number of projects, and a relatively short time frame. Thus, several aspects of the handbook's use could not be tested, including its use across *all* types of HA projects, its use over time (particularly when a project is handed off from one team to another), and the feasibility and usefulness of compiling data from many individual projects to inform higher-level assessments. Because of the limited pilot testing to date, **we recommend that the prototype handbook undergo further testing, if possible, before it is broadly used.** This would allow the incorporation of additional feedback from the field to ensure that the usability criteria are met to the greatest extent possible.

Although additional pilot-testing of the handbook could help ensure that the handbook meets all of usability criteria, there are two related issues that further pilot-testing will not adequately address unless specific supportive actions are taken by DoD: the issue of additional burden and the issue of usefulness for compiling project-level assessment data to inform higher-level assessments. The first issue was questioned by several reviewers and mentioned as a concern in both pilot tests. Most staff responsible for HA projects are currently not undertaking any project assessment activities, including fulfilling the existing requirement to complete an after-action report, so the perception is that any project assessment activity will add burden. It is hoped, however, that the assessment approach outlined in the prototype handbook will actually reduce the burden on staff after an initial period of uptake and adjustment because it will make project-relevant information available and accessible to successive teams that are responsible for HA projects, thus reducing the burden of project reporting requirements. However, the potential for reduced burden—both real and perceived—will be contingent on DoD both formally requiring HA project assessment and enforcing that requirement. **DoD should explicitly require HA project assessment and enforce this requirement** (e.g., new project nominations should not be accepted unless assessment requirements from previous projects are met). Without the coupling of a clear requirement and enforcement of that requirement, assessment will always be perceived as an additional task, as opposed to an integral part of project implementation.

The level of burden related to conducting project assessment activities will also depend on the way in which data are captured and stored. The process of collecting and storing project assessment information manually or on local computers will be difficult to maintain over time, particularly when HA projects are handed off from one personnel team to the next. Centralized data collection for project assessment using the OHASIS (or another relevant) database could ensure the consistent and easy capture of data through clearly defined data fields and automated reminders. This approach would also ensure that assessment data across all HA projects is accessible to appropriate personnel for conducting higher-level program- or country-level assessments. To reduce the burden of HA project-level assessment and to allow generated data to inform higher-level assessments, **the collection of project assessment information as outlined in the prototype handbook should be incorporated within current and future efforts to upgrade and improve the OHASIS database.**

Without information captured in OHASIS or another similar system, project-level assessment will be of limited use—particularly beyond the individual project level. DoD will need to decide whether it will begin to require project-level assessment using the handbook before this retrofitting of OHASIS is complete or whether it would prefer to wait until the system

is redesigned to support project assessment activities. While starting sooner may be beneficial from the perspective of training and instilling best practices in project management, the potential for perceived additional burden and limited usefulness is higher without the systems support that would be provided by a redesigned OHASIS database. To the extent that funds are available, **the capture of HA project assessment information as outlined in the handbook should be incorporated into OHASIS before HA project assessment is required and the requirement is enforced.** The revised handbook reflects the implementation of this recommendation. That is, it assumes that the OHASIS system will have been redesigned and in place by the time the handbook is being used in the field.

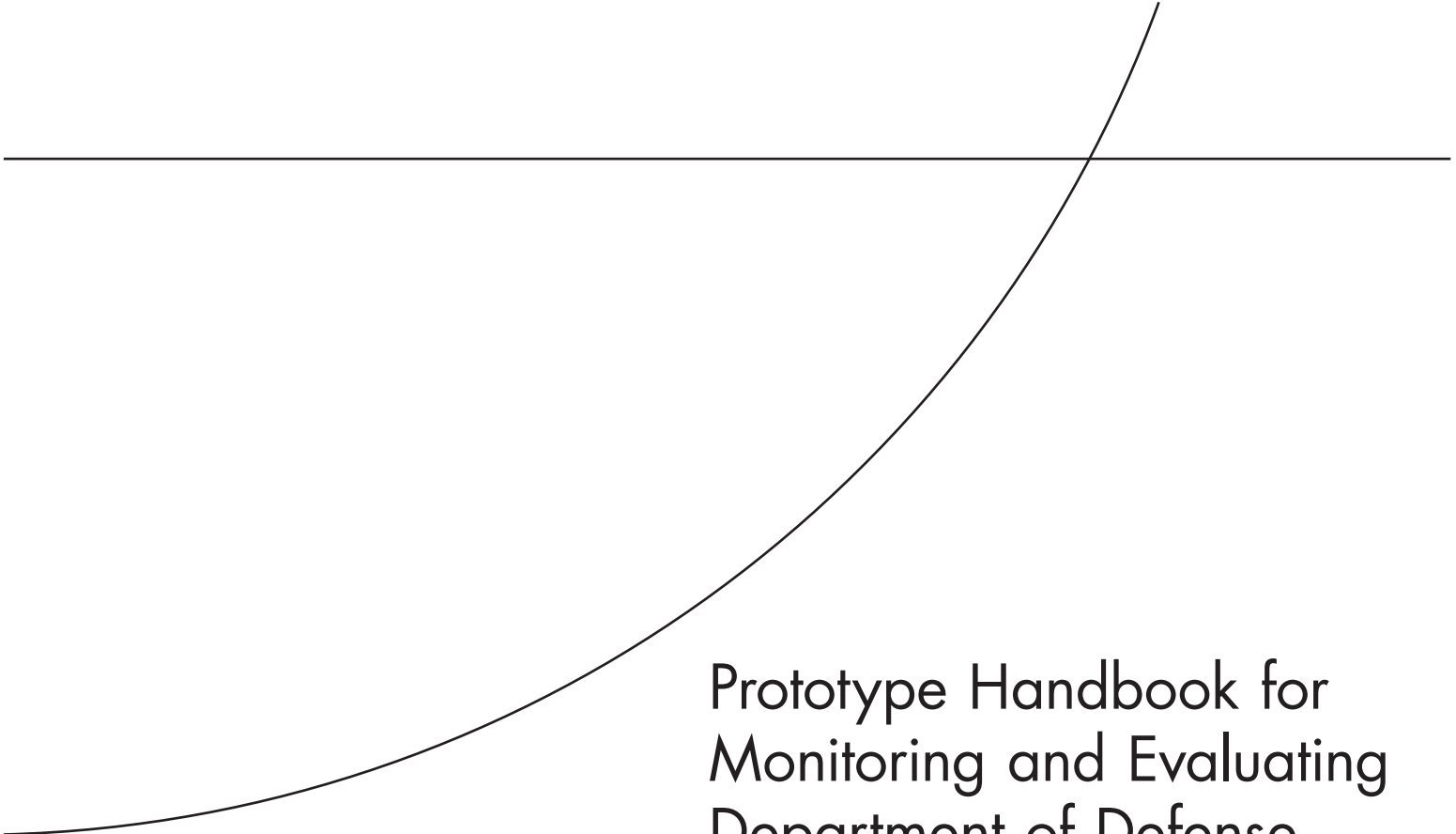
Given the limited pilot-testing, we received little feedback on the best ways to organize and format the handbook to ensure its most effective use in the field. One major revision that was considered was to change the order of the handbook's major sections by placing the user's guide before the primer. This was considered in light of one user's statement that it would be better if the instructive (as opposed to the informative) part of the handbook came sooner. This change, while understood by additional reviewers, introduced confusion, so the original order was maintained. Additional pilot tests would help inform the best order of presentation for the wider population of intended handbook users.

Another aspect of presentation that we were unable to address adequately was the physical format of the handbook. We sent the handbook draft to reviewers and pilot-testers electronically, and they printed it out. Although there are several different handbook formats that could be tested in an additional round of pilot tests, based on the feedback that we received, **we recommend a letter-sized, spiral-bound handbook with a flexible protective cover and a CD insert that includes an electronic version of the handbook and all handbook worksheets.** The letter-sized format would ensure that all worksheets are readable and large enough for recording data. The inclusion of a manipulable electronic version of each worksheet will allow users to download these files onto their computers and use them for each HA project that they implement. The electronic worksheets will be important tools for recording project assessment data in the field, with or without the accompanying redesigned OHASIS database. If OHASIS is not redesigned, the electronic worksheets will also serve as a means for tracking and storing project assessment indicators over time.

Despite limited opportunities to pilot-test this handbook, we believe that it represents an important introduction to M&E concepts and a useful guide to project assessment that can and should be used beyond OHDACA-funded HA projects. Feedback from reviewers and multiple requests to use the handbook for training seem to corroborate this view. It is hoped that a final handbook, designed with a specific focus in mind, will be used more broadly by DoD and potentially beyond. To support this broader use within DoD, in particular, **the handbook should be incorporated into the formal DoD handbook series.** This would require its periodic review and update and would likely encourage its use for training and project-level assessment, both across DoD and in other interested U.S. government agencies.

Prototype Handbook for Monitoring and Evaluating Department of Defense Humanitarian Assistance Projects

This appendix presents the prototype handbook for monitoring and evaluating DoD HA projects.



Prototype Handbook for Monitoring and Evaluating Department of Defense Humanitarian Assistance Projects

A Primer on Monitoring and
Evaluation and a User's Guide for
Project Assessment



Center for Military Health Policy Research

A JOINT ENDEAVOR OF RAND HEALTH AND THE
RAND NATIONAL DEFENSE RESEARCH INSTITUTE

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Abbreviations

COCOM	combatant command
DoD	U.S. Department of Defense
GEF	Guidance for the Employment of the Force
HA	humanitarian assistance
ISDR	United Nations International Strategy for Disaster Reduction
M&E	monitoring and evaluation
MOE	measure of effectiveness
MOP	measure of performance
NGO	nongovernmental organization
OHASIS	Overseas Humanitarian Assistance Shared Information System
OHDACA	Overseas Humanitarian, Disaster, and Civic Aid
USAID	U.S. Agency for International Development
USG	U.S. government

Introduction

Background and Context

The U.S. Department of Defense (DoD) defines *humanitarian assistance* (HA) as “programs conducted to relieve or reduce the results of natural or manmade disasters or other endemic conditions such as human pain, disease, hunger, or privation that might present a serious threat to life or that can result in great damage to or loss of property.”¹ HA has long been a function of DoD, and HA plays an important role in current military operations. HA operations are typically carried out to support broader strategic goals of U.S. policy, such as national security related to reconstruction and stabilization, and DoD, such as achieving improved access and influence. DoD notes that HA “provided by U.S. forces is limited in scope and duration. The assistance provided is designed to supplement or complement the efforts of the host nation civil authorities or other U.S. government agencies that may have the primary responsibility for providing humanitarian assistance.”² DoD HA includes activities that the civilian community would consider development. Thus, while typically short-term in nature, they should be designed with a longer-term vision so they are consistent (or at least do not conflict) with longer-term development objectives.

DoD wants to ensure that the goals and objectives of its HA missions are met. The purpose of this handbook is to provide a practical, easy-to-use, step-by-step guide to planning and executing DoD HA project assessments. It was designed with a particular focus on HA projects funded by Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) appropriations, but it should be applicable to the assessment of other assistance projects both within and outside DoD.

The development of this handbook is part of an increased emphasis on assessment across DoD. **While the focus of this handbook is assessment at the HA *project* level, it was developed so that the information collected can be used for higher-level *program-* and *strategic-level* assessments.** For example, assessments related to individual OHDACA projects can be rolled up to inform the achievement of overall OHDACA program objectives (analyzed via a more comprehensive program assessment); similarly, OHDACA program assessments, along with other program assessments, can be rolled up to inform the achievement of national strategic objectives.

¹ U.S. Joint Chiefs of Staff, *Department of Defense Dictionary of Military and Associated Terms*, Washington, D.C., April 12, 2001, as amended through March 17, 2009.

² U.S. Department of Defense, *Policy Guidance for FY08 Overseas Humanitarian Assistance*, September 19, 2007.

Reasons for Assessing HA Projects: Why Do It?

HA project assessment will usually involve the use of scarce staff time and resources. It is therefore important to understand its full utility before engaging in it. If done correctly, project assessment will help project managers to ensure that their projects are carried out as intended and produce the desired results.

Project assessment can serve many functions and can be used to assess project outcomes in both the short and long terms. In the short term, monitoring the performance of typically short HA projects allows project managers to review activities and make midcourse corrections as well as ensure that subsequent projects take advantage of any lessons learned. For longer, multiyear projects, performance monitoring during project execution allows project managers to identify necessary midcourse corrections that will allow the project to finish on time and within budget and produce the desired results. In the longer term, project assessment can be used to document the outcomes of a project after completion and the sustainability of outcomes over time, especially the capacity of the host nation to carry on activities made possible by an HA project.

In general, project assessment information that is collected will be contained in a report (such as an after-action report) associated with the project. Specific measures, or indicators, are gathered over time and, along with qualitative interpretations, become the basis for communicating up the chain of command whether and how the project met its specific objectives.

Future resource allocations may depend on past project achievements, and data from project assessments can guide those choices. HA project planners should take higher-order strategic guidance into account when planning, implementing, and assessing projects, since project-level achievements can feed into the achievement of higher-order objectives (e.g., at program, country, theater, and combatant command [COCOM] levels). Thus, HA project assessment is important to project planners and managers as well as higher-level decisionmakers.

Purpose and Approach

DoD's goal in using monitoring and evaluation (M&E) or assessment is to ensure that its strategic objectives are achieved, from the tactical up to the strategic level. This handbook aims to assist in that process, focusing on tactical-level project assessment (i.e., project monitoring) and suggesting that the collection of this project-specific assessment information can contribute to higher-level program and strategy assessments (i.e., higher-order evaluations).

M&E and assessment requirements and guidance are relatively recent—but have been increasingly emphasized—in DoD. This means that some people responsible for project oversight and assessment may not be familiar with M&E principles and the practice of project assessment. This handbook is designed to provide a basic understanding of M&E concepts and terms and to facilitate project assessment. It was designed to be user-friendly, focused on DoD priorities, compliant with DoD guidance, and compatible with guidance from and current practice in relevant agencies beyond DoD.

Where possible, the handbook draws on widely used frameworks from relevant civilian programs. For example, DoD HA work often complements efforts of other U.S. government (USG) agencies, most notably the U.S. Agency for International Development (USAID) and the U.S. Department of State. This handbook incorporates relevant M&E terminology

and constructs used by USAID, the Department of State, other USG agencies, and a small number of nongovernmental organizations (NGOs). **Thus, it presents a real opportunity to both standardize HA project assessment across DoD and facilitate interagency communication** when DoD collaborates with or relies on other agencies to measure the effectiveness of HA projects.

Organization and Use of the Handbook

This handbook is divided into two parts: Part I, “M&E Primer,” and Part II, “Step-by-Step User’s Guide for Project Assessment.” The M&E Primer consists of three chapters. Chapter One provides a general overview of M&E and describes basic concepts and vocabulary related to the project life cycle. Chapter Two describes planning for HA project assessment, including the articulation of tactical-level project objectives and higher-order program and strategic objectives and the identification of appropriate measures of performance (MOPs) and measures of effectiveness (MOEs) based on those objectives. Chapter Three provides a core set of required indicators to be used across all OHDACA projects, as well as required indicators for specific project types. It also provides guidance on selecting additional indicators to fit specific project needs and objectives. Part I will be of interest mostly to users who are new to the concepts of monitoring and evaluation, but it can also serve as a refresher for more seasoned users or as a reference guide for any user assessing a project using the user’s guide in Part II. Part II describes the execution of HA project assessments, step by step, from start to finish. For users who are familiar with M&E principles and project assessment practice, Part II is likely all that will be required to conduct project assessment activities. The handbook also includes detailed information about two methodological issues that are relevant to project monitoring: community consultation (Appendix A) and avoiding bias (Appendix B). It concludes with a glossary of core terms that are relevant to M&E (Appendix C) and a list of references.

This handbook is accompanied by a CD that contains both an electronic version of the handbook text and the handbook worksheets in an editable format. The worksheets are presented in the Step-by-Step User’s Guide, along with instructions for completing them. Further details, including how the indicators were developed, are provided in Chapter Three of the primer (Part I). The worksheets should be used during project planning (i.e., the “objective tree” tool) and for data collection throughout the course of HA project implementation (to collect baseline, immediate, and follow-up MOP and MOE indicators). Information can be entered by hand onto hard copy printouts of worksheets, which may be particularly useful when collecting information in the field, and then keyed in electronically later to local project team computers or the Overseas Humanitarian Assistance Shared Information System (OHASIS).

PART I

M&E Primer

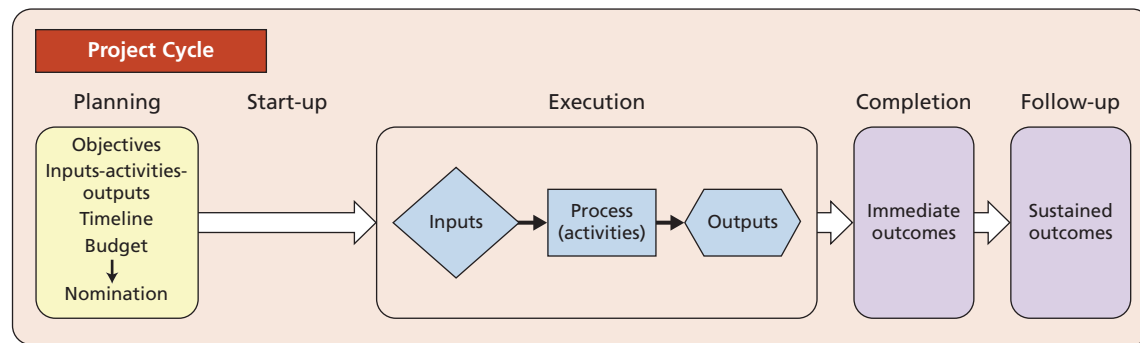
The purpose of this chapter is to provide a basic introduction to important concepts and vocabulary for monitoring and evaluation (M&E). Throughout this handbook, we refer mostly to “assessment”—particularly project assessment. *Assessment* is a general term that covers the concepts of both “monitoring” and “evaluation,” each of which has a distinct meaning in the civilian community. *Monitoring* typically refers to individual project management and tracking of inputs, processes, outputs, and outcomes, whereas *evaluation* typically refers to more in-depth analysis to assess higher-order impacts (e.g., achievement of higher-order program or strategic objectives), the reasons for these impacts, or other analytic questions. Evaluation is typically conducted across a variety of individual projects, at the program or even a more strategic level, and is often done by a third-party evaluator. These distinctions are not important for U.S. Department of Defense (DoD) humanitarian assistance (HA) project-level assessment, so *assessment* is used throughout this handbook when referring to HA project-level assessment. However, many of the concepts and terms presented in this chapter are those used in the civilian world to refer to M&E.

This chapter includes a diagram that illustrates the steps in the HA project cycle and the steps in a project assessment that can be used to measure performance and effectiveness. This chapter reviews the project and assessment cycles and introduces basic concepts and terms related to each, using examples from relevant DoD HA projects around the world to illustrate the main points. This chapter also links the key DoD terms *measure of performance* (MOP) and *measure of effectiveness* (MOE) with analogous terms used in the civilian world. These linkages are important to facilitate communication and collaboration between in-country HA project managers and managers of similar projects in other U.S. government (USG) agencies or non-governmental organizations (NGOs).

The Humanitarian Assistance Project Cycle

The main components of the project cycle are shown in Figure 1.1. During the **planning** phase of a project, a planner considers local needs and integrates the goals of key stakeholders (e.g., local partners and members of the country team—the USG team in a country—including DoD representatives) with higher-level strategic objectives (e.g., from theater campaign plans) to determine the best project to undertake and identify the reasons for undertaking it. The project proposal is developed in detail, including project objectives, expected outcomes (i.e., results from or effects of the project and its outputs), planned outputs (i.e., products that result from the project), project activities, and required inputs (e.g., stake-

Figure 1.1
Project Cycle



RAND TR784-1.1

holder buy-in, funding, materials, land). These project elements are used to develop a project timeline, budget, and assessment plan as part of the project proposal (nomination).

Assuming that the project is approved and resources are provided, the project is executed. The **start-up** phase entails all the preparation required to execute the project, including assessing local conditions on the ground and consideration of the need for contractors. The **execution** phase of the project is when the actual work is done: when the school is built, the well dug, the clinic refurbished, and so on. Figure 1.1 breaks down the execution phase into three subcomponents:

- *Inputs* refer to the broad set of resources required to get the project done (e.g., funding, material, human resources) and pre-planning steps that should be in place prior to undertaking project activities (e.g., project-related plans). For a well project, inputs might include the land on which the well is to be dug, the machinery necessary to do the drilling, the materials necessary to build an appropriate cover for the well, and the project assessment plan for testing project performance and effectiveness.
- *Processes* are the activities that must be undertaken to achieve the project objectives. These might include working with the community to determine the best site for the well, drilling the well, and building appropriate covers or shelters for the well.
- *Outputs* are the direct, often physical, results of the processes. Examples of outputs include a well that meets some set of specifications or the number of people trained to maintain the well or monitor water quality. Outputs are different from outcomes, as explained next.

In the project cycle, project inputs feed into processes that lead to project outputs. Those outputs (e.g., a well is built, a school is refurbished, people are trained) are expected to have short- and long-term **outcomes** in the community. Short-term (immediate) outcomes are those that are expected immediately after project **completion** or shortly thereafter; long-term (sustained) outcomes are maintained or manifest one or more years after project completion and are usually observed during the project **follow-up** stage. In the ideal project, outputs lead to both **immediate** and **sustained outcomes**, such as improved drinking water quality and other improvements for the community, capacity-building for local partners, and increased military access to and influence in the community.

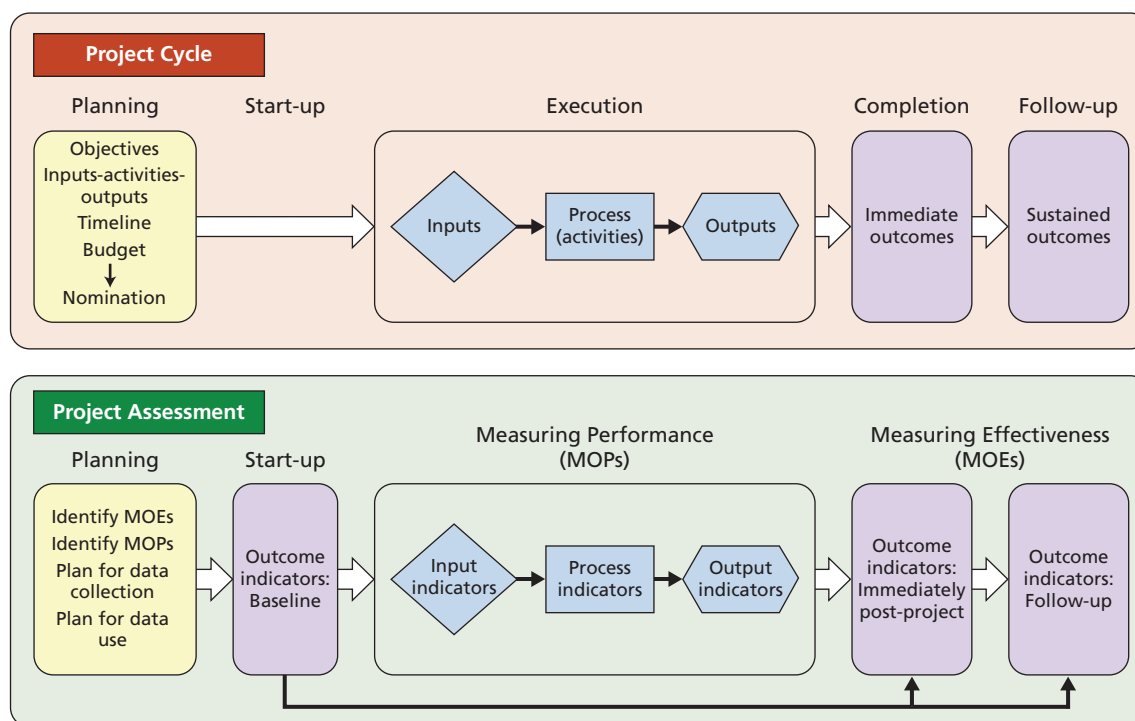
Humanitarian Assistance Project Assessment

Measuring performance and effectiveness through project assessment is integral to the success of any HA project. DoD defines *assessment* as “a continuous process that measures the overall effectiveness of employing joint force capabilities during military operations” and “determination of the progress toward accomplishing a task, creating an effect, or achieving an objective.”¹

The overall goals of project assessment are to ensure that the project is executed according to plan, enable midcourse corrections for projects long enough or large enough to warrant measurements during project execution, provide information about the immediate and sustained outcomes from the project, provide information about project contributions to higher-order strategic objectives, and provide feedback that will be useful in the design and implementation of subsequent projects.

Planning for project assessment is an integral part of project planning and management and should be undertaken as part of the project design phase. While a project is being developed, project planners should think about the results they wish to achieve, the processes that can be used to help ensure the desired results, and the indicators that can be used to measure results. Project assessment must incorporate every aspect of the project cycle, including inputs, processes (activities), outputs, and outcomes, and should be based on both project-specific objectives and the project’s contribution to higher-order strategic objectives. Figure 1.2 shows the components of project assessment as they relate to the project cycle.

Figure 1.2
Measuring Performance and Effectiveness: Links to the Project Cycle



RAND TR784-1.2

¹ U.S. Joint Chiefs of Staff, *Joint Operations*, Joint Publication 3-0, September 17, 2006, incorporating change 1, February 13, 2008.

The steps for project assessment **planning** are shown on the left side of the two panels in Figure 1.2. The most critical part of the assessment planning phase is to identify the relevant MOEs (that is, measures for outcomes that will indicate that the desired results have been achieved) and MOPs (that is, measures of inputs, processes, and outputs indicating whether the project's performance is on track). In addition, it is important to develop a plan for data collection throughout the project cycle (including a timeline, methods, and the resources required) and a plan for data use (how data will be reported, to whom, and how such data might be used).

An important component of the data collection plan is a plan to collect information on desired outcomes both before and after project execution so that changes in outcomes of interest can be documented. For example, the desired outcome for refurbishing an existing school or for building a new school may be enhanced access to school among children within a particular geographic area or increased numbers of children enrolled in school. In this example, to confirm that the desired outcome is achieved once project execution is complete, it is essential to measure the distance or time that children in the population of interest must travel to attend school or the number of children enrolled in school *before* a school is refurbished or a new school is built. This is called a **baseline** measure of the outcome indicator. The collection of baseline indicators should be carried out at project **start-up**, just prior to the beginning of project execution, so that appropriate comparisons can be made upon project completion.

The two primary DoD terms related to M&E are **measure of performance (MOP)** and **measure of effectiveness (MOE)**. As described later in this chapter, these terms have formal definitions in the military (see Tables 1.1 through 1.4). MOPs and MOEs represent information collected to document and communicate whether the project manager is on track with project execution and has achieved the desired results. Another word for such measures is *indicator*. The joint Department of State–U.S. Agency for International Development (USAID) M&E dictionary defines an indicator as a “quantitative or qualitative variable that provides reliable means to measure a particular phenomenon or attribute.”² In the context of this handbook, an indicator specifies—in words or numbers—a level of objective achievement, measured in terms of outcomes (MOEs) or tangible elements associated with project execution (MOPs).

Measures of Performance

A MOP is “a criterion used to assess friendly actions tied to measuring task accomplishment.”³ That is, an MOP is an indicator of progress during the implementation of a project. MOPs are collected during the execution phase of the project cycle (see Figure 1.2).

Often, after the relevant resources for a project have been acquired, the military turns to local contractors or other local partners to execute the proposed HA project. In these cases, it might be particularly important to monitor whether the project is going to be finished on time, within budget, and so on. These are examples of performance indicators or MOPs. Today, many in-country HA project managers are already measuring the performance of their projects using the “on-time-and-within-budget” criteria. For example, midcourse corrections are often made based on information about progress relative to proposed timelines and budgets.

² U.S. Agency for International Development, Planning and Performance Management Unit, Office of the Director of Foreign Assistance, *Glossary of Evaluation Terms*, March 25, 2009.

³ U.S. Joint Chiefs of Staff, 2008.

When the project is completed, other (output) MOPs might focus on whether the item built, produced, or delivered meets a particular set of standards.

As shown in Figure 1.3, three types of indicators are associated with MOPs. The figure shows input, process, and output indicators subsumed under the umbrella term *measures of performance* to highlight the connection between the concepts presented in the project cycle diagram (Figure 1.1) and the concepts presented in the HA guidance.

Input indicators are criteria used to assess access to all necessary resources for project completion and pre-planning steps that should be in place before project activities are undertaken. For example, “Land was provided on time for well construction,” or “Land was purchased with funds provided by local NGOs.” **Process indicators** are the criteria used to assess progress associated with project activities. Examples include whether a project was completed within its established deadline and whether the project was implemented in conjunction with host-nation counterparts. Process indicators can also be used to communicate qualitative data about the project. For example, in projects that are long enough (e.g., multiyear) or large enough to warrant measurement of process indicators during project execution, solutions to problems may be discovered along the way. Conversely, problems may be uncovered after a (typically shorter) project is completed. Either way, detailed information can provide lessons learned for the project planner and for others who undertake similar projects in the future.

This information might be communicated in a narrative way, using short paragraphs to explain the problem, the solution, and the resolution. **Output indicators** are criteria used to assess the direct products of the project activities. Output indicators can be used to communicate that the work was completed (e.g., well built by *x* date) and that specifications were met (e.g., well meets specified local, national, or international water and sanitation standards).

Table 1.1 summarizes the definitions of MOPs, presents different types of MOP indicators, and provides a simple example of each.

Other terms have been used to describe the same general concepts captured by the term *measure of performance*. Key M&E terms related to MOPs are shown in Table 1.2. For example, an MOP is sometimes referred to as a “measure of process” or “measure of progress” because it is an indicator associated with the execution of humanitarian assistance projects. The terms *performance indicator* and *process indicator*, used by the United Nations, the Organisation for Economic Co-Operation and Development, USAID, the Department of State, and others, are related terms, as noted in Table 1.2. What all these definitions highlight is the importance of ensuring that the relevant data are collected and the project is executed on time, within budget, and without problems, or that problems encountered are resolved.

Figure 1.3
Terms Associated with Measures of Performance

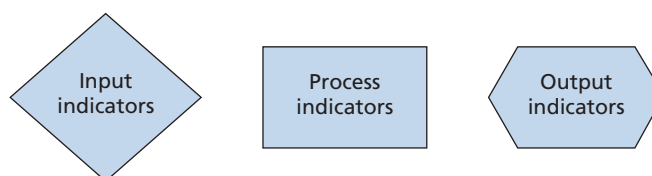


Table 1.1
Measures of Performance: Types, Definitions, and Examples

Measures of Performance			
Criteria used to assess friendly actions tied to measuring task accomplishment. Also called MOPs. MOPs are generally quantitative, but they can also apply qualitative attributes to task accomplishment. ^a			
Type	Input indicator	Process indicator	Output indicator
Definition	Criterion used to assess pre-project planning steps that should be completed prior to project start and access to all necessary resources for project completion	Criterion used to assess progress of project activities	Criterion used to assess direct products of project activities
Example	Adequate staff to complete the project	Activities completed within a certain time frame	Well built to specified local, national, or international standards

^a U.S. Joint Chiefs of Staff, 2008.

Measures of Effectiveness

An MOE is defined by DoD as “a criterion used to assess changes in system behavior, capability, or operational environment that is tied to measuring the attainment of an end state, achievement of an objective, or creation of an effect.”⁴ MOEs help project managers communicate how well a project objective was achieved, the impact of the project activity on the community, the extent to which the project improved local capacity, and so on. MOEs measure the outcomes of the project. Thus, as shown earlier in Figure 1.2, outcome indicators representing MOEs must be collected at various points in time to assess changes in desired outcomes and the sustainability of those outcomes. Figure 1.4 shows the sequencing of data collection that is generally required to obtain MOEs.

Once a project has been approved, but before it is executed, it is important to obtain—from existing sources, such as USAID or local NGOs—or to collect information to determine the **baseline** against which short- and long-term outcomes of the project can be compared. This stage is represented by the first box in Figure 1.4. Outcome indicators (or MOEs) collected at baseline (project **start-up**) provide information on the starting point of any project: Under what circumstances in the local area did the project begin? *The same outcome indicators collected at baseline are collected again after the project is completed, so that any changes caused by the project can be assessed. Outcome indicators are often collected again one or more times in the future to assess the sustainability of the project results over time.*

At project completion, an immediate assessment of outcomes is important. This assessment should determine whether the project achieved its specific objectives and contributed to higher-level goals. It is important to note that the methods proposed here may not allow rigorous attribution of outcomes to project activities, but they nonetheless fulfill the needs of in-country HA project managers. Comparing **outcome indicators immediately post-project** to the **baseline** data collected before the project started will help in communicating the kind of changes the project has effected in the community. Here, the point is to assess the project soon after its completion, using measurable indicators to determine, for example, the extent to

⁴ U.S. Joint Chiefs of Staff, *Department of Defense Dictionary of Military and Associated Terms*, Washington, D.C., April 12, 2001, as amended through March 17, 2009.

Table 1.2
Key M&E Terms Related to Measures of Performance

Term	Definition
Indicator	<p>1. A quantitative or qualitative variable that provides a reliable means to measure a particular phenomenon or attribute.^a</p> <p>2. Quantitative or qualitative factor or variable that provides a simple, reliable basis for assessing achievement, change, or performance. A unit of information measured over time that can help show changes in a specific condition. A given goal or objective can have multiple indicators.^b</p>
Inputs	<p>1. Resources provided for program implementation. Examples include money, staff, time, facilities, equipment, and plans.^a</p> <p>2. The financial, human, material, technological, and information resources provided by stakeholders (i.e., donors, program implementers, and beneficiaries) that are used to implement a development intervention.^c</p> <p><i>This handbook also adds pre-planning steps that should be in place as inputs before a project commences.</i></p>
Outputs	<p>1. The products, goods, and services that result from an intervention.^a</p> <p>2. A final product or service delivered by a program or project to beneficiaries, such as goods, services, training, or facilities that a program is expected to produce to achieve its expected objectives.^d</p>
Performance	Degree to which a development intervention or development partner operates according to specific criteria, standards, or guidelines or achieves results in accordance with stated goals or plans. ^e
Performance or process indicator	<p>1. A particular characteristic or dimension used to measure intended changes. Performance indicators are used to observe progress and measure actual results against expected results.^a</p> <p><i>This definition differs slightly from the DoD definition in that the USAID/Department of State definition includes results. It spans the military's definitions of both MOP and MOE.</i></p> <p>2. Specific statistics chosen because they provide valid, practical, and comparable measures of progress or level of change toward achieving expected results in a given period. Used to measure the extent to which goals have been achieved. Indicators correspond to the expected accomplishment and are used to measure performance. One expected accomplishment can have multiple indicators.^d</p> <p>Related terms: achievement indicator, expected accomplishment, performance measure</p>

NOTE: Definitions are paraphrased.

^a U.S. Agency for International Development, Planning and Performance Management Unit, Office of the Director of Foreign Assistance, *Glossary of Evaluation Terms*, March 25, 2009.

^b International Fund for Agricultural Development, "Annex A: Glossary of M&E Concepts and Terms," in *Managing for Impact in Rural Development: A Guide for Project M&E*, 2002.

^c United Nations Population Fund, Division for Oversight Services, "Tool Number 1: Glossary of Planning, Monitoring, and Evaluation Terms," in *Programme Manager's Planning, Monitoring and Evaluation Toolkit*, March 2004.

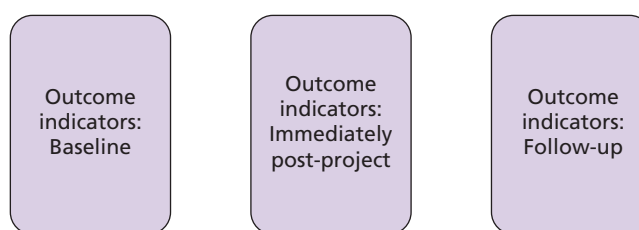
^d United Nations Monitoring, Evaluation and Consulting Division, *Glossary of Monitoring and Evaluation Terms*, August 2006.

^e Organisation for Economic Co-Operation and Development, Development Assistance Committee, *Glossary of Key Terms in Evaluation and Results Based Management*, 2002.

which local access to sources of drinking water and water quality have improved and whether trained members of the community maintain the well or facility that was built or renovated as part of the project.

Outcome indicators at follow-up are measured to assess whether project outcomes have been sustained over a longer period. To what extent do community members still have access to clean drinking water from the well? How many are attending the school or seeking health

Figure 1.4
Sequencing of Data Collection for Measures of Effectiveness



RAND TR784-1.4

services at the clinic? Are capacities that were built during project execution still evident? Comparing outcome indicators at follow-up to those collected at baseline and immediately after project completion will help communicate any lasting changes achieved (i.e., MOEs) in a community.

To summarize the preceding discussion, Table 1.3 provides a definition of MOEs, the general sequencing for data collection of MOE outcome indicators, a description of how they are used at different points in time, and an example of each.

The DoD's use of the term *effectiveness* is related to the M&E terms *outcomes*, *effects*, *results*, and *impacts*, as used by the Department of State, USAID, the United Nations, and other organizations. Formal definitions for these M&E terms are presented in Table 1.4. *Measures of effectiveness* (MOEs) is the term DoD uses to communicate project success in reports or other communications aimed at explaining how well project managers are doing.

Table 1.4 does not include all the important terms that people use when talking about M&E. These terms are, however, the most important terms used by civilian agencies and organizations that may have some connection to DoD HA projects. There are many other terms that HA planners might come across when developing a project assessment plan or writing up an assessment report in coordination with other groups. The glossary at the end of this hand-

Table 1.3
Measures of Effectiveness: Types, Definitions, and Examples

Measures of Effectiveness			
Criteria used to assess changes in system behavior, capability, or operational environment that are tied to measuring the attainment of an end state, achievement of an objective, or creation of an effect. Also called MOEs. These measures are typically more subjective than MOPs and can be crafted as either qualitative or quantitative. Quantitative measures can reflect a trend or show progress toward a measurable threshold. ^a			
Data collection point	Baseline	Immediately post-project	Follow-up
Description	Criterion to determine the original state of the community	Criterion to determine the immediate effects of a project on the community	Criterion to determine the effects of a project on the community after a specified length of time
Example	Water quality before the well was built	Water quality after the well is built compared to before well was built	Water quality after one year compared to just after the well was built and to before the well was built

^a U.S. Agency for International Development, 2009.

Table 1.4
Key M&E Terms Related to Measures of Effectiveness

Term	Definition
Baseline	Information collected before or at the start of a project or program that provides a basis for planning or assessing subsequent progress and impact. ^a
Effect	Intended or unintended change that results directly or indirectly from an intervention. ^a Related terms: result, outcome, impact
Impact	1. A result or effect that is caused by or attributable to a project or program. Often used to refer to the higher-level effects of a program that occur in the medium or long term and can be intended or unintended, positive or negative. ^a 2. The overall effect of achieving specific results. In some situations, it includes changes—planned or unplanned, positive or negative, direct or indirect, primary or secondary—that a program or project helped to bring about. It could also connote the maintenance of a current condition, assuming that the condition is favorable. Impact is the longer-term or ultimate effect attributable to a program or project, in contrast to outputs or expected accomplishments, which are shorter-term effects. ^b Related terms: effect
Indicator	1. A quantitative or qualitative variable that provides a reliable means to measure a particular phenomenon or attribute. ^a 2. Quantitative or qualitative factor or variable that provides a simple, reliable basis for assessing achievement, change, or performance. A unit of information measured over time that can help show changes in a specific condition. A given goal or objective can have multiple indicators. ^b
Outcome	1. A result or effect caused by or attributable to a project, program, or policy. Often used to refer to more immediate and intended effects. ^a <i>Outcome indicators would directly measure these outcomes.</i> 2. The intended or achieved short- and medium-term effects of an intervention's outputs, usually requiring the collective effort of partners. Outcomes represent changes in development conditions that occur between the completion of outputs and the achievement of impact. ^c Related terms: effect, impact, output, result
Result	1. The intended (or unintended) output, outcome, or impact. ^a <i>USAID and the Department of State use the term "performance indicator" to identify the direct measures of a result. That definition is broader than the term "measure of performance" and includes some aspects of MOE.</i> 2. The <i>measurable</i> output, outcome, or impact (intended or unintended, positive or negative) of a development intervention. ^b (Emphasis added.)

NOTE: Definitions are paraphrased.

^a U.S. Agency for International Development, 2009.

^b International Fund for Agricultural Development, 2002.

^c United Nations Population Fund, 2004.

book provides a more complete set of M&E-related terminology based on glossaries or dictionaries developed by the Department of State, the United Nations, USAID, and others.

Pulling It All Together

Table 1.5 summarizes the information presented in this chapter by linking elements of the project cycle to corresponding assessment elements (MOPs, MOEs, and the specific types of indicator in each) and the questions addressed by each type of indicator.

Table 1.5
Measuring Performance and Effectiveness: Summary

Project Phase	Step in Project Cycle	Step in Project Assessment Cycle	Indicators	Question Answered
Pre-Execution	Start-up	Baseline measurement	Outcome indicators: Baseline	What are the conditions before the project begins?
Execution	Inputs	Measuring performance	Input indicators	Were required resources available?
	Process		Process indicators	Were activities completed on time and within budget?
	Outputs		Output indicators	What direct, tangible products or services did the project deliver?
Completion	Immediate outcomes	Measuring effectiveness	Outcome indicators: Immediately post-project	Did the project achieve its objectives?
Follow-up	Sustained outcomes		Outcome indicators: Follow-up	Are the changes produced by the project still evident?

Now that the basics of M&E have been covered in terms of concepts and definitions, Chapter Two uses a practical example to address how to think about and plan for project assessment.

Planning for Project Assessment

Project assessment captures key aspects of performance and effectiveness for HA projects based on the objectives that the project seeks to achieve. Once a planner has a good understanding of the needs to be addressed (e.g., unmet community needs), a project can be designed. Project design includes identifying project objectives, the related desired outcomes and outputs, and required activities and inputs. Once desired outcomes and outputs and required activities and inputs are identified, indicators should be developed to measure each (i.e., MOPs to measure inputs, activities, and outputs and MOEs to measure outcomes) so that progress toward objective achievement can be tracked.

As will be discussed in Chapter Three, DoD has established a set of required core indicators for use in all HA projects, as well as indicators related to each of the major types of HA projects. These required indicators cover various aspects of project management and higher-order objectives as stipulated by the HA policy guidance; they also address general objectives for the most typical HA project types. They will allow for the development of a comprehensive, comparable data set across all HA projects and, thus, program-level and other relevant assessments.

Aside from these standardized indicators, a project planner may need to develop additional MOP and MOE indicators—or use relevant existing indicators from USAID or other sources—to measure progress toward project-specific objectives. This occurs when a project has unique objectives not covered by the required indicators or when it does not fall under one of the five project types for which indicators have been developed.

This chapter addresses how to plan for project assessment—that is, thinking through project-specific objectives and developing appropriate additional MOPs and MOEs (as applicable). A realistic scenario of an HA project assessment is that someone arrives at post and becomes responsible for a project that was completed recently or even a year earlier by a predecessor. The project may or may not have a project assessment plan, but the new staff member is responsible for post-project outcome assessment. Another potential scenario is that the new person arrives at post and assumes responsibility for a project that was nominated by the predecessor. The project has been approved, and the new person is asked by the combatant command (COCOM) HA manager to provide a project assessment plan that includes specific MOEs. Yet another scenario is that the person is beginning to think about a project nomination and needs to develop both the project plan and the associated plan for project assessment, which means determining the appropriate MOEs and MOPs. This chapter describes the *bare minimum* that must be done to determine the MOEs and MOPs. It uses the example of building a village well, a typical HA project, for illustration. To this end, the chapter introduces a tool that can be used to guide planners and project managers to identify project-specific objec-

tives and select related MOPs and MOEs by examining the causes and effects of an HA project in a systematic way.

How to Determine Measures of Effectiveness

What Objective Is the Project Intended to Achieve?

When feasible, it is important to first determine the project's objective, or desired result, before deciding what the project itself will be. The project should be designed or determined based on the objectives to be achieved. The decision to build a well is important, but it is more important to understand the *reasons* for building the well. The well is not an end in itself; it is a means to achieve a desired result or set of results. MOEs are designed to measure such results. The intended objectives must be clearly stated so that appropriate MOEs can be identified.

Some reasons that a well might be built with Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) support:

- so the community has clean water and is healthier
- so girls can spend less time collecting water and have more time to go to school
- so women can spend less time collecting water and have more time to earn income.

These are examples of the kinds of objectives to achieve a strategy of “sustained positive impact on the civilian population.” But there are other factors that must be addressed for a well to have these positive results. In the case of these three examples, the well must be maintained for good water quality, there must be schools that admit girls, and there must be productive ways for women to make money.

Beyond project-level objectives of sustained positive impact, OHDACA policy guidance describes some higher-order reasons to carry out an HA project, or providing an “indirect benefit to USG security interests.” Some examples of such higher-order strategic objectives include the following:

- Enhance the legitimacy of the host nation.
- Provide evidence of U.S. commitment to the host nation.

Further, the OHDACA policy guidance specifies even higher-order strategic objectives:

- Increase military access to the community and country.
- Improve military influence in the community.
- Increase the legitimacy of local officials in the eyes of the community.
- Create a better public image of Americans, particularly the U.S. military.

OHDACA 2008 policy guidance stipulates that HA projects must address all these higher-order strategic objectives and be consistent with overall security cooperation guidance: HA activities must contribute, at least in some small way, to the achievement of the country campaign plan, regional campaign plan, theater campaign plan, and Guidance for the Employment of the Force (GEF). Project nominations must be explicit on these points.

Determining the full range of results that the project is trying to achieve is the basis for identifying appropriate MOEs. MOEs (and MOPs, for that matter) should also be linked, to

the greatest extent possible, to the objectives that HA projects are required to address. Working through those connections while a project is being developed makes it easier to track progress and communicate success.

The next section describes a tool, called an “objective tree,” to develop MOEs by framing project activities as the “causes” to help produce desired “effects.” The approach itself provides a way to think through what needs to be done to achieve the project’s objectives—including required inputs, activities, outputs, and outcomes—and then identify the indicators that will best communicate progress and outcomes to others.

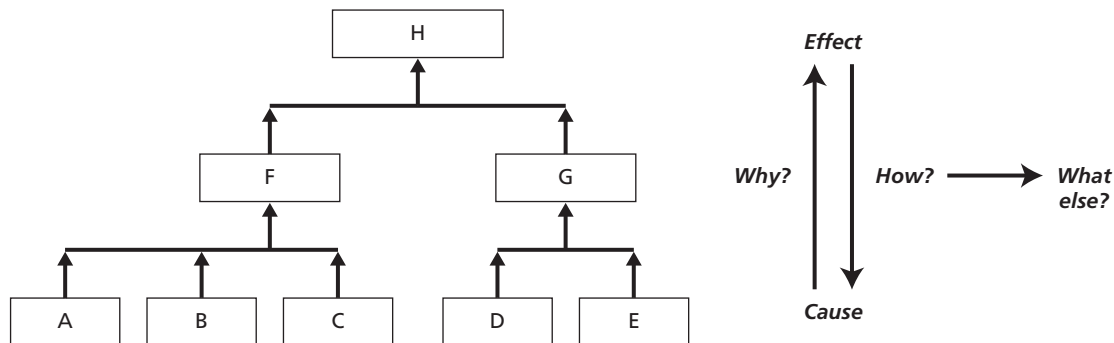
Tool to Analyze Causes and Effects

An HA project, such as building a village well, can be understood within many contexts, including its social and strategic contexts, its relation to policy guidance, and the ways in which it might fulfill a range of tactical and strategic objectives. How can MOEs be identified in a way that acknowledges this complexity while ensuring that assessment remains systematic and relatively simple to carry out?

The objective tree (see Figure 2.1) is a tool that guides project planners and managers in determining MOEs by displaying causes and effects in a systematic and logical way. The objective tree is a well-tested analytic tool that planners have used for more than 40 years to display cause-effect relationships.¹

Each box in the objective tree represents a **cause that is necessary** to achieve the effect above it. The boxes represent completed actions (e.g., “well is built”) rather than processes (e.g., “build well”). Each level in the objective tree identifies the necessary and sufficient actions needed to move up to the next level. For example, if a project accomplishes A, B, and C, it will accomplish F, and if the project accomplishes D and E, it will accomplish G. Together, F and G will result in the accomplishment of H. Because this is an *objective* tree, completed actions are considered “objectives.” This keeps the focus on accomplishments, rather than on the processes or activities undertaken to reach the objectives.

Figure 2.1
Objective Tree Tool



NOTE: Each level identifies the necessary and sufficient factors to achieve the level above.

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¹ See, for example, D. McLean, *The Logical Framework in Research Planning and Evaluation*, Washington, D.C.: International Service for National Agriculture Research, Working Paper No. 12, June 1988.

The arrows in the objective tree itself always go up to show the direction of cause and effect. However, the cause-effect relationships displayed in the tool can be examined from all directions. Moving up through the tree should answer *why* the project intends to undertake the activities below. Moving down through the tree should explain *how* the project will achieve the objectives in the levels above. And moving laterally through any particular level explains *what else* is required (i.e., what other objectives must be accomplished) to achieve the objective in the level above.

How the objective tree tool works in practice can be illustrated through a simple well-building example. Ideally, a project planner would start with a stated objective and work down the objective tree tool to identify the specific project design and needs for accomplishing that objective. However, this is not always feasible for HA project planners, particularly when they have entered the project planning or execution process midstream. Alternatively, then, suppose that the starting point for a planner is a decision by the planner's predecessor that a well will be built. The planner might first ask logistical questions about *how* the well will be built. Figure 2.2 provides possible responses: To build the well, the location must be identified, materials acquired, and a construction team organized.

Next, the planner might ask what higher-level effects the project is trying to achieve to understand the project in its context and to determine how it helps achieve the objectives in the policy guidance. An example is shown in Figure 2.3. The well is to be built because the project

Figure 2.2
Initial Causes and Effects for the Well-Building Example

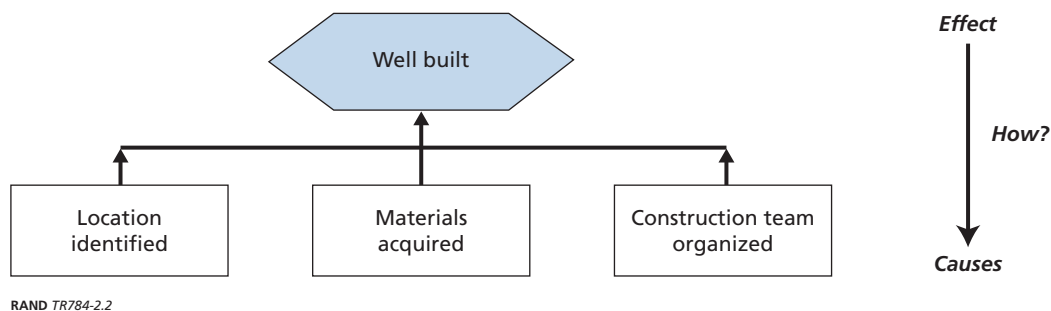
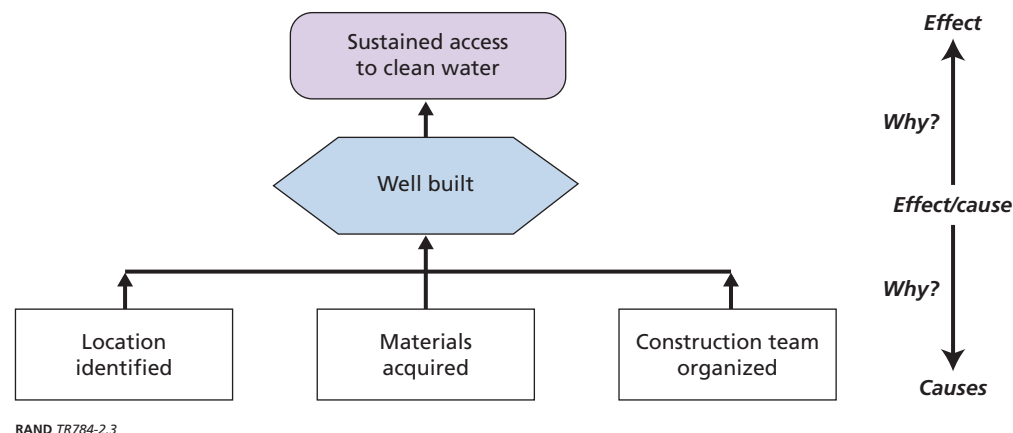


Figure 2.3
Higher-Level Effects for the Well-Building Example



Importance of “Necessary and Sufficient”

An evaluation team traveled 1,500 kilometers of roads built by USAID in impoverished western Kenya in the late 1970s. Everyone the team talked to said that they liked the roads because if someone got sick, the person could be taken to the hospital more easily. However, after dozens of interviews, the team never found an instance of a person actually being taken to the hospital by vehicle. Why? Almost everyone was too poor to own a vehicle.

The same team passed a woman carrying her bananas to market on her head just as a bus passed her by. She explained to the team that the price of the round-trip bus fare was the same as what she would get for her one stem of bananas, so she had to walk.

The roads were necessary, but without an income-generating activity, they were not *sufficient* to increase traffic, much less provide such benefits as getting people to the hospital more quickly.

planner or the planner’s predecessor wants to ensure “sustained access to clean water” in the community. The causes in the bottom row of the figure lead to the first effect (“well built”), which, in turn, becomes a cause of the higher-level effect of “sustained access to clean water.”

The tree is particularly useful for determining **sufficient** causes to produce desired results. The items included in all the boxes at a given level must collectively accomplish all that is necessary and sufficient to achieve the results shown in the next level above.

The planner keeps asking, “**What else** is necessary?” to produce the desired results until all of the causes that are sufficient to produce the next-level result are listed. Years of evaluations in the civilian world have shown that a failure to address all the factors needed to achieve a desired result (i.e., not asking, “What else?”; forgetting something important)—and thus not meeting the “necessary-and-sufficient” criteria—is perhaps the most common reason that projects fall short of expectations. Continuing with the example of the village well and looking further at the desired result of sustained access to clean water, the planner asks, “What else, beyond building the well, is necessary for sustained access to clean water?” Because something could happen to jeopardize the well or its water quality, the planner determines that the well must be maintained in a way that will keep the water “clean” and that there must be a way to ensure this. In this case, the planner is working downward from the broader objective of access to clean water, consistent with the logical flow from objectives to inputs in planning a project.

Figure 2.4 thus extends the objective tree to incorporate the idea that workers must be trained to maintain the well (“Locals trained to maintain the well,” in the objective tree), a second necessary cause to produce the effect of sustained access to clean water. The next question to ask is, “Are these causes sufficient to produce the planned result?” If so, the planner moves up to the next level of the tree; but if not, the planner continues to identify other causes that are necessary to produce the intended result.

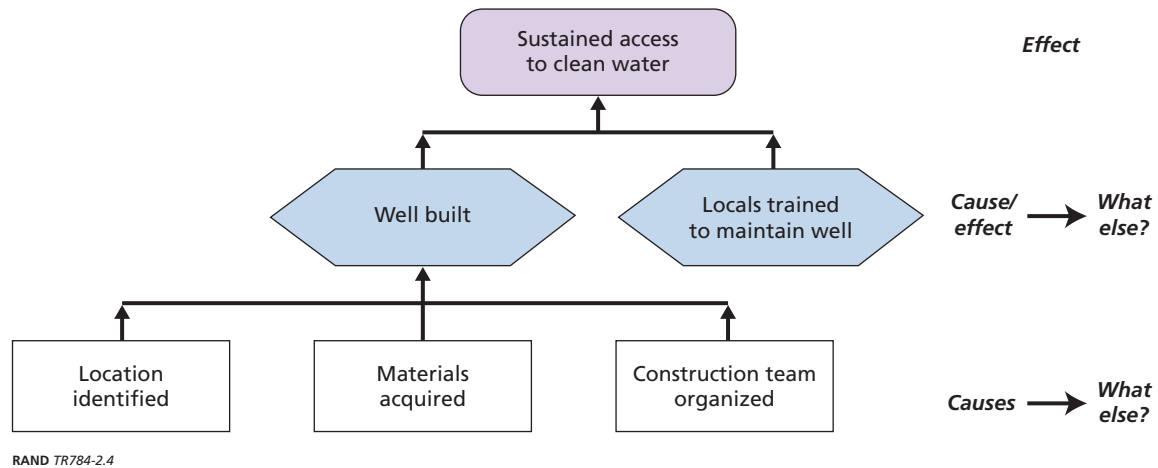
“Why?” Matters

In Afghanistan, a captain was responsible for distributing U.S. food aid to the provinces shortly after the action began. The most efficient way to distribute the food was to put it on the warlords’ trucks. The captain’s objective was accomplished successfully.

A year later, when USG civilians were supporting local elections, most Afghans voted for the warlords who had brought them food. They might have voted for the warlords anyway because they were powerful, but what seemed like an efficient means of food distribution also reinforced the power and legitimacy of one group of actors in the region.

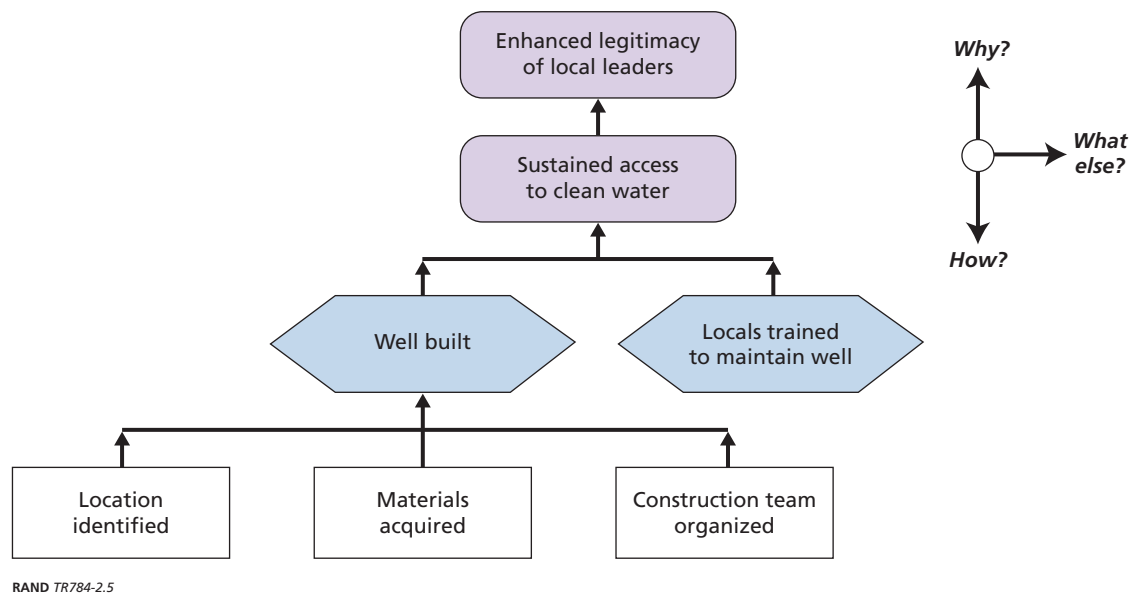
Knowing that the higher-order objective was increasing the host nation’s legitimacy and influence, the captain might have made very different choices about how food should have been transported.

Figure 2.4
Sufficient Activities to Achieve Desired Effects in the Well-Building Example



Having now completed three levels of the objective tree tool, the planner considers the highest level and next asks *why* sustained access to clean water is important. One answer that ties into policy guidance and is important in almost all HA work is increasing the legitimacy of local leaders (see Figure 2.5). Working together with local leaders to build a well can improve the standing of the local leaders in the eyes of their citizens. Of course, this is just one example among many. Another reason to provide sustained access to clean water is to improve health (e.g., by reducing diarrheal diseases). It is important to respond to what matters in the local context and to create an objective tree that is responsive to those circumstances and connects appropriately to HA policy guidance and other objectives associated with the country, theater, and so on.

Figure 2.5
Connecting to Higher-Level Objectives in the Well-Building Example



Cause-and-Effect Relationships in the Context of the Project Cycle

Now that the relatively abstract process of linking objectives to project design and activities has been completed, it is important to return to the matter of practical project planning and place the cause-and-effect relationships in the context of the project cycle shown in the top half of Figure 2.6. (Note that this figure is identical to Figure 1.2 in Chapter One.)

The project cycle reflects both the time dimension and the causal chain. That is, the movement from left to right represents the passage of time as well as steps in the project's implementation. In Figure 2.7, the rows (or levels) in the objective tree created from the well example have been linked with the corresponding components of the project cycle. The shapes and colors of the boxes follow those used in the project cycle in Figure 2.6.

In the example of the village well, **inputs** for building a well are land, materials, and human resources. Those, in turn, lead to specific **processes** (or activities) to be carried out: identifying a location, acquiring materials, and organizing the construction team. Those processes will produce desired **outputs** (the well is built, locals are trained to maintain the well), which will lead to the planned **outcome**: sustained access to clean water.

The objective tree demonstration in Figure 2.7 includes a level called “impact,” which is not represented in the project cycle because HA projects are generally too small and too short to have long-term or large-scale impacts of their own. In other words, building one well is unlikely to have a significant or measurable effect on the legitimacy of local leaders—the anticipated impact in this example. However, a single HA project can potentially contribute to improved public perceptions of local leaders. Collectively, a group of HA projects is more likely to contribute to improved public perception and thus enhance the legitimacy of local leaders.

Figure 2.6
Measuring Performance and Effectiveness: Links to the Project Cycle

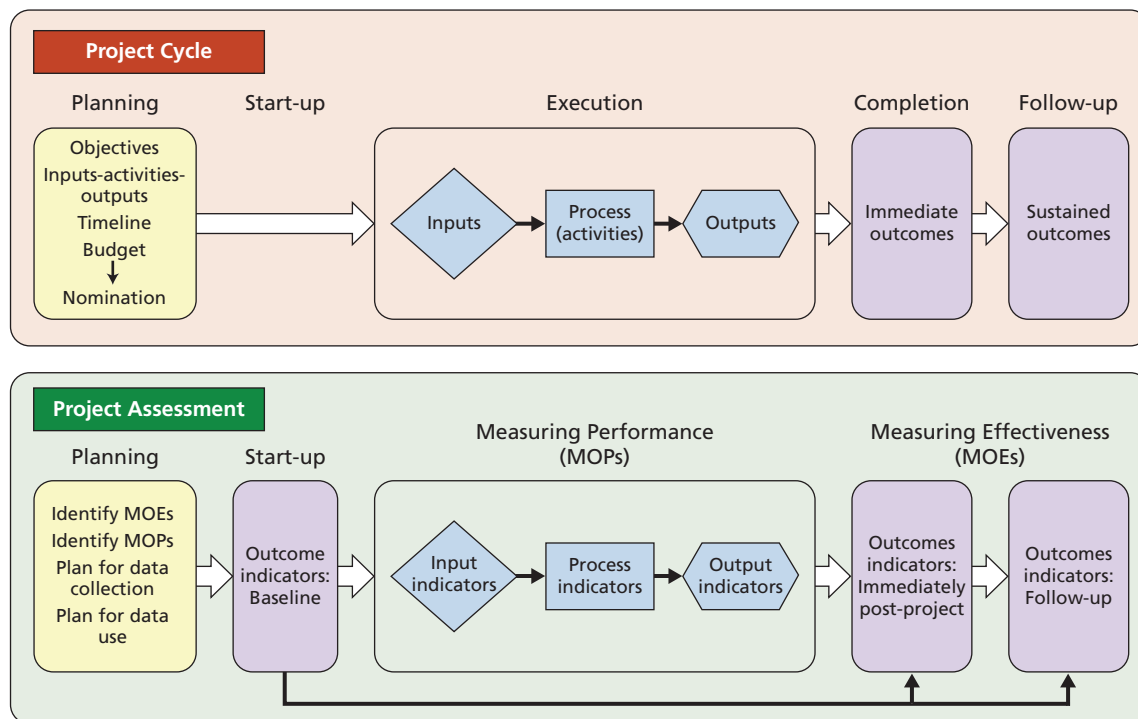
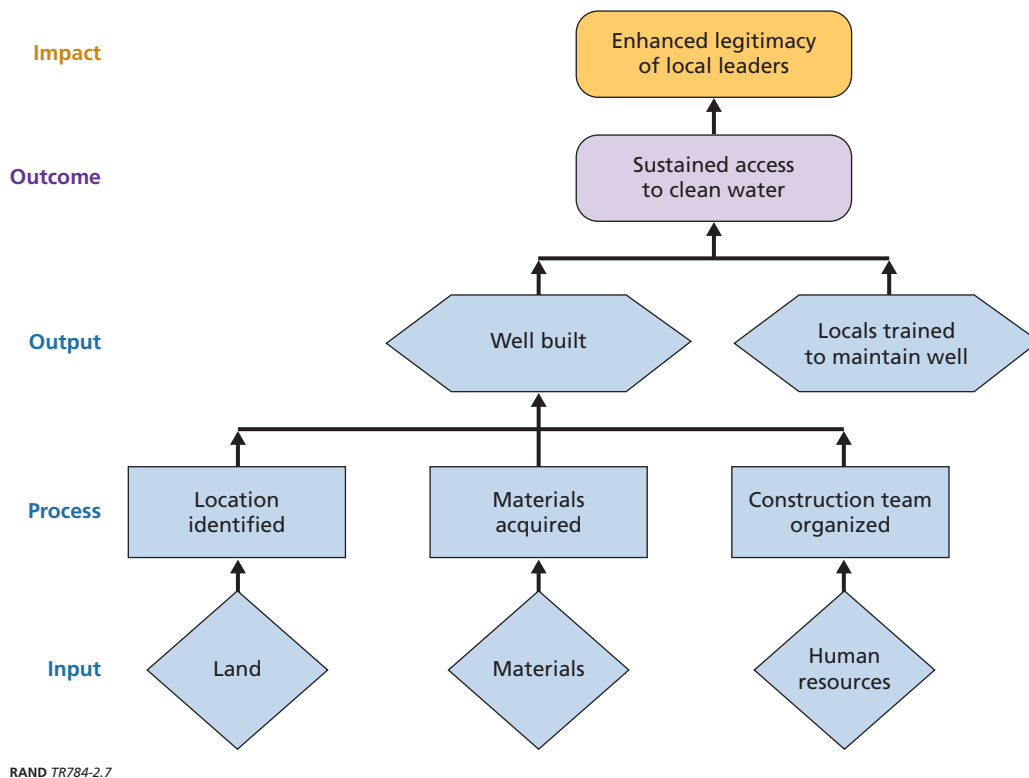


Figure 2.7
Connecting the Objective Tree with the Project Cycle



Therefore, impact indicators reflecting higher-order strategic objectives should be tracked, to the extent possible, so that there are data available for larger-scale assessments of multiple projects, country plans, theater campaign plans, or the OHDACA program as a whole. Such large-scale assessments (or “evaluations,” as they are called in the civilian world) are the responsibility of other groups within DoD (e.g., assessment offices or technical assistance groups) and are beyond the scope of this handbook.

What Are the MOEs?

As discussed in Chapter One, MOEs are a type of indicator that directly measures **outcomes**. In the example of building a well, the desired outcome to be measured is that the community around the well has **sustained access to clean water**. How does one measure access to clean water? This outcome or objective has two initial components that need to be captured: access must be improved and the water must be clean. When indicators are measured over time, they capture a third component: sustainability of the desired outcomes of access and clean water.

- *Sustained access:* At its most basic, this means that the local community can get water out of the well. The well needs to be sufficiently close to the community, and it must produce enough water at a reasonable rate to meet the needs of the community. Traditionally, the World Health Organization defines “access” to drinking water in terms of distance, time, and flow from the well. For example, the proportion of the population that lives within 500 meters (or 10 minutes) walking time to the well has “access” to the well. The

well should provide water at a rate that minimizes waiting time (15–30 minutes) and that ensures that the fill time for a water container is short (no more than three minutes to fill a 20-liter container). Each is a possible indicator of access.

- *Clean water:* The determination of whether water is clean technically requires some kind of testing of water quality. Generally, such a standard would translate into an indicator, such as “number of fecal coliforms per 100 milliliters at the point of distribution.” Although it is required for DoD HA well-building projects, in some cases, the chemical test to accurately measure coliform levels might be infeasible. Thus, the “test” (and related indicator) might instead consist of a visual inspection to determine that nothing obvious has contaminated the well and that the water in the well looks satisfactory (not turbid or cloudy). Both are MOEs that measure clean water at two different levels of precision. Which one is used is up to the local project planner, but in general, larger-scale or more strategically important projects will require the more precise indicator of water quality.

The indicators for “sustained access” and “clean water” are first collected as baseline measures and then as immediate outcome indicators, reflecting the success of the project at its completion. The same indicators would be measured again a year after project completion, allowing an evaluation of the “sustained” part of the project objective.

As explained in Chapter One, in most cases, the same **outcome indicators** should be collected at baseline (before the project), immediately after project completion, and during follow-up after one year—that is, data should be collected using the same indicators in different periods for purposes of direct comparison over time. This is the best way to communicate what a project really accomplished. Using different data (say, from another village) or different indicators (associated with water disinfectants, for example) at these different times will not allow the comparisons needed to document what the project really achieved.

It is clear that even a simple objective, such as sustained access to clean water, might have more than one possible MOE. This chapter provided just a few possible MOEs for the primary objective in this example project. Developing MOEs can be daunting. To make it easier, Chapter Three describes indicators in more detail and provides a set of indicators for use across all HA projects, along with indicators for each common type of HA project (water and sanitation, construction of health infrastructure, construction of nonhealth infrastructure, health services, and disaster-related projects). In fact, most of the example MOEs in the well-building example were selected from the indicators in Chapter Three and the Step-by-Step User’s Guide for Project Assessment (Part II of this handbook). Given the MOEs provided in Chapter Three, additional MOE development will be necessary only for HA projects with unique objectives or those that do not fall into one of the major preidentified project types.

It should be noted that, sometimes, it is impossible to gather direct indicators for a project outcome because, for example, the outcome is abstract or it is too difficult or expensive to measure directly. In those cases, it may be necessary to identify appropriate **proxy indicators** associated with an outcome. A proxy is not a direct measure or indicator, but it is either highly suggestive or highly correlated with what the project is trying to achieve. More details regarding proxy indicators, including some examples, are provided at the end of Chapter Three.

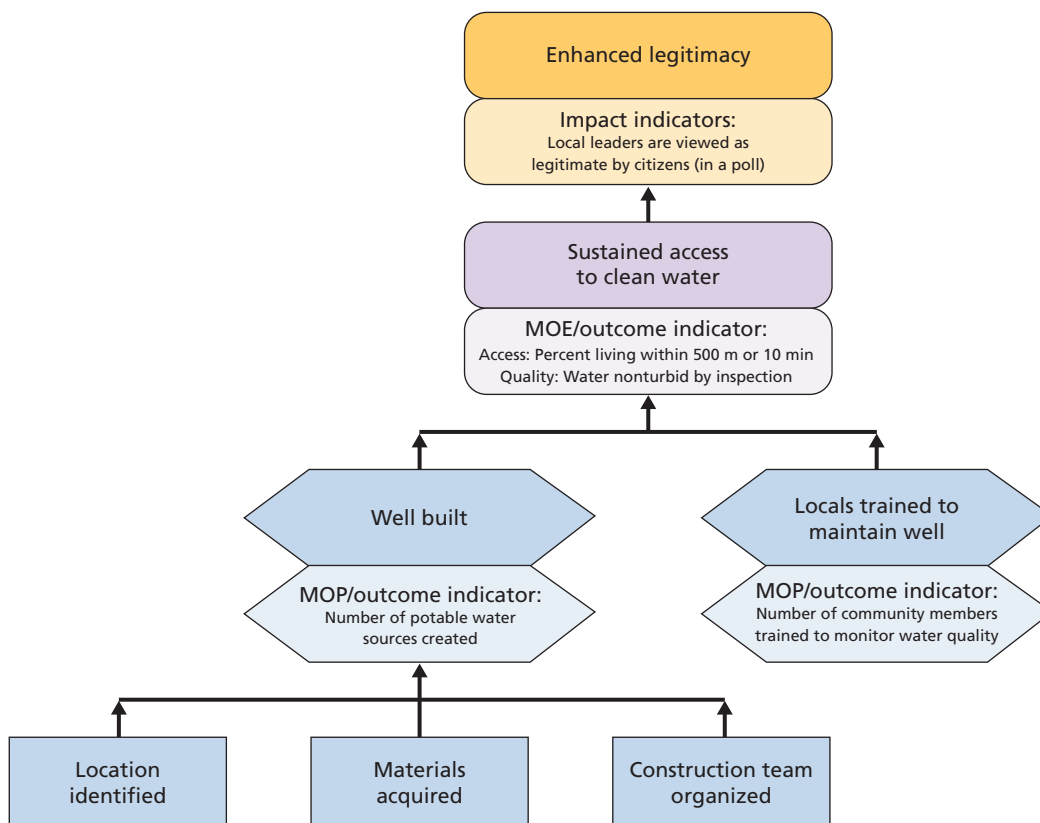
How to Determine Measures of Performance

To know whether the project is making progress toward the achievement of its planned results, managers need to follow the execution of the project. Just as data for the indicators of immediate and sustained outcomes (MOEs) must be collected, so too must data for those indicators that directly measure the progress of the project—the inputs, processes (activities) and outputs (MOPs). Figure 2.8 returns to the well-building example but shows indicators in the shadow boxes below the objectives. For simplicity, only one indicator is shown below each box, but there may be more than one indicator for each, depending on the scope and complexity of the project.

What Are the MOPs?

In Figure 2.8, the MOP for choosing the location could be a simple “yes” or “no” question answered by the project manager. Similar MOPs would be chosen for the acquisition of materials, organizing the construction team, or contracting issues that may be associated with the well project. With respect to outputs, MOPs may be specific (e.g., well built to relevant local, international, or national standards, as appropriate), or they may reflect a general output (e.g., well built in a way that enables local maintenance over time). Again, there may be multiple MOPs for a given input, process, or output.

Figure 2.8
MOPs and MOEs Associated with the Objective Tree in the Well-Building Example



Objectives Drive Project Design, MOEs, and MOPs

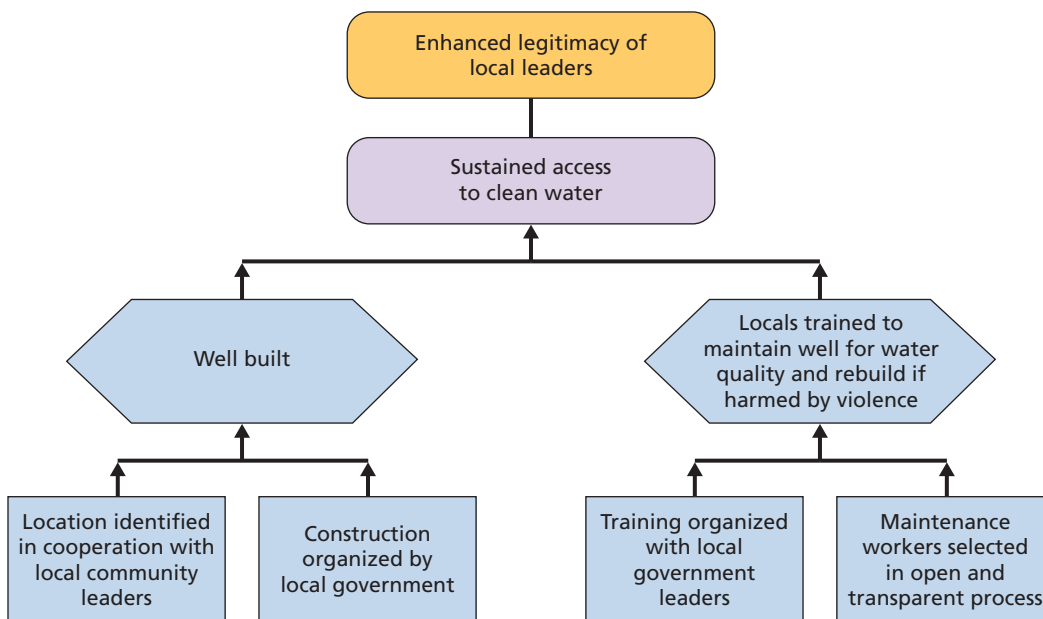
Figure 2.8 includes an indicator for the impact of “enhanced legitimacy of local leaders.” This is beyond the HA project cycle, but the project planner or other country team member may want to consider collecting project-specific data of this type for two reasons:

- Knowing and understanding the higher-order objective will affect how the project is implemented and, just as importantly, why and how achievements should be measured as they relate to higher-order (strategic) objectives.
- OHDACA program managers will be evaluating selected projects (or groups of projects). They will need data on individual projects as they assess the collective achievements of a larger number of projects.

In this case, a focus on the higher-order objective of enhancing the legitimacy of local leaders would cause project planners to carry out the project in a different way. For example, it would be most efficient to simply have a local official designate a site for the well. But if both the local community and the local leaders are involved in site selection or the ribbon-cutting ceremony, those leaders will be seen as part of the action of bringing the well to the community, which should enhance their legitimacy with local citizens. This consideration would modify the project plan and the causal chain, as shown in Figure 2.9.

With this higher-order objective in mind, the activity or process of “location identified” in Figure 2.8 is now “location identified in cooperation with local community leaders” in Figure 2.9; similarly, “construction team organized” is now “construction organized by local government.” A change in the causes at the bottom of the objective tree would, in turn, change

Figure 2.9
Harmonizing the Objective Tree



some of the indicators at each level. For example, the simple yes/no indicator was fine for documenting that the location was identified, but this is no longer the point. How might the indicator be changed to better reflect the importance of involving local leaders so that the project better responds to the higher-order “legitimacy” objective? In addition, the inputs required to execute the newly stated activities or processes will expand. Land will still be required for “location identified in cooperation with local leaders,” but “meetings with local leaders” will also be a required input. Similarly, “construction organized by local government” will require not only materials but also a local government committee.

What is even more important than the names of the primary indicators is an understanding that activities or processes (e.g., identifying the location, acquiring materials, organizing the construction team) should lead to outputs (e.g., well is built), which lead to outcomes (e.g., sustained access to clean water)—and that a manager must document whether or not this has occurred. Knowing which objectives have been achieved and where problems remain allows a manager to take corrective actions to ensure a project succeeds in meeting its direct objectives and, in turn, successfully contributes to higher-level objectives.

Indicators for Humanitarian Assistance Projects

This chapter presents indicators that can be used as measures of performance (MOPs) and measures of effectiveness (MOEs) for OHDACA-funded HA projects. They may also be useful for other DoD HA projects (for example, humanitarian and civic assistance activities). The indicators are divided into three major categories: sets of required **project management indicators**, **core indicators** to be collected across *all* HA projects, and **indicators related to specific project types**, as required for each main type of HA project: water and sanitation, health infrastructure, nonhealth infrastructure, health services, and disaster-related projects. Standardizing indicators facilitates comparisons across HA projects and aggregation of data for higher-level assessment at the country, COCOM or theater, and DoD (e.g., OHDACA or security cooperation program) levels. To allow clear comparisons, project managers need to make measurements related to intended outcomes both at project startup (baseline data before a project begins) and after a project is complete (immediately after project completion and again after one year).

The standard indicators presented in this chapter are required, but they do not necessarily represent all that are needed. Project planners may need to choose existing indicators used by other entities, such as USAID, or develop additional MOE and MOP indicators to measure the achievement of their project-specific objectives using the guidance provided in Chapter Two and at the end of this chapter.

The first section of this chapter reviews how the required indicators were developed. The second section provides a review and explanation of the required core indicators, and the third section provides a review and explanation of the indicators for five types of HA projects. The final sections of the chapter provide guidance on choosing (or developing) additional project-specific indicators when a project has unique objectives that cannot be measured by the core indicators or when a project does not fall into one of the five project categories presented. We conclude this chapter with additional tips regarding proxy indicators and avoiding bias in designing indicators.

How the Indicators Were Developed

The indicators presented here are required for DoD OHDACA-funded projects. They are intended to provide a well-balanced picture of HA project activities and their results. The development of these indicators involved consideration of HA and security cooperation guidance, the GEF, the DoD HA project portfolio, and other information regarding the future directions of HA activities. As described in the Step-by-Step User's Guide for Project Assess-

ment (Part II of this handbook), the **project management indicators** reflect various aspects of performance and collaboration with other USG agencies, since national and military policy require interagency cooperation (e.g., in stability operations). The **core indicators** reflect higher-order DoD strategic objectives to which all DoD HA activities should be contributing to some extent. The **indicators related to specific project types** reflect typical project objectives for the most common OHDACA-funded HA projects. Often, project planners will supplement these indicators with those that reflect their own unique project objectives.

The required indicators can be collected easily by using the worksheets at the end of the Step-by-Step User's Guide for Project Assessment and on the CD that accompanies this handbook. The worksheets can be used to manage projects, extract lessons learned, and prepare after-action reports. Input into the OHASIS database will facilitate data storage, generation of after-action reports, handing projects over to subsequent DoD or civilian personnel to complete the assessment process, and the ability to "roll up" information across many projects to inform broader-level assessments. The indicators combine qualitative and quantitative information to provide a complete picture of the project.

The indicators are largely drawn from established international humanitarian assistance and development sources, such as the Sphere Project (a coalition of NGOs involved with disaster response and humanitarian assistance that have created a set of disaster-response standards and related indicators), the United Nations Development Programme and other UN offices, USAID, the Department of State, and other organizations. These indicators have been developed and tested in applicable environments for ease of collection, reliability (consistency), and validity (accuracy). Using previously tested indicators makes communicating across projects and across agencies much easier.

Management and Core Indicators Required for All HA Projects

Indicators required for all HA projects are presented in Tables 3.1 and 3.2. Table 3.1 presents input and process indicators that are related to project management. Table 3.2 presents core indicators for all HA projects and describes how they map to higher-order strategic objectives. In that table, the first column lists the highest-order strategic objective to which the indicators contribute, the second column shows the project-specific objective, and the third column lists the indicators themselves. The fourth column identifies how the indicator fits into the project cycle (i.e., input, process, output, or outcome), the fifth column defines the indicator as an MOP or MOE, and the final column provides at least one method of collecting data for each indicator.

Overall, the indicators are intended to be straightforward in terms of what should be measured. It is important to remember, however, that there are resources that can and should be drawn upon for assistance and support in collecting indicator data. For example, USAID colleagues in country are likely to have experience in similar data collection exercises and can be of assistance in the areas of methodology and logistics. University students and faculty, as well as other host-nation counterparts, are also likely to be valuable resources and should be tapped as appropriate. Worksheets for collecting core indicator data can be found in the user's guide.

Table 3.1
Project Management Indicators for All Projects

Aspect of Project Management	Indicator	Indicator Type	Indicator Family	Data Source
Project planning	Project assessment plan developed before project execution (Y/N)	Input	MOP	Self-report
	Post-project sustainment plan developed (Y/N)	Input	MOP	Self-report
Project timeline	Project completed by original deadline (Y/N) (if no, explain briefly)	Process	MOP	Self-report
Project budget	Project completed within original budget (Y/N) (if no, explain briefly)	Process	MOP	Self-report
Coordination across USG agencies	Project reviewed and discussed with relevant State Department officials and feedback incorporated (Y/N/NA)	Input	MOP	Self-report
	Project reviewed and discussed with relevant USAID officials (including Office of Foreign Disaster Assistance) and feedback incorporated (Y/N/NA)	Input	MOP	Self-report
	Project reviewed and discussed with other relevant USG officials (specify) and feedback incorporated (Y/N/NA)	Input	MOP	Self-report
	Project reviewed and discussed with other relevant agencies (indicate which type and specify which agency) and feedback incorporated (Y/N/NA)	Input	MOP	Self-report
	<ul style="list-style-type: none"> • International organizations • Other donor nations • Local and international NGOs • Relevant private-sector representatives • Third-party allied/coalition militaries 			
	USAID provided financial, human, or in-kind resources (Y/N/NA)			
	Other USG counterpart (specify) provided financial, human, or in-kind resources (Y/N/NA)			
	Host nation agreed to sustain the project	Input	MOP	Self-report
Project troubleshooting	Problems impeded project execution (Y/N) (if yes, specify)	Process	MOP	Self-report
	Problems resolved satisfactorily (Y/N) (if yes, explain how; if no, explain why)	Process	MOP	Self-report
Project assessment	Project assessed with reference to stated objectives (Y/N)	Process	MOP	Self-report
	Baseline assessment completed (Y/N, date completed)	Process	MOP	Self-report
	Baseline assessment conducted with at least one community member (e.g., leader, supervisor) (Y/N/NA)	Process	MOP	Self-report
	Immediate post-project assessment completed (Y/N, date completed)	Process	MOP	Self-report
	Immediate post-project assessment conducted with at least one community member (Y/N/NA)	Process	MOP	Self-report
	One-year post-project assessment completed (Y/N, date completed)	Process	MOP	Self-report
	One-year post-project assessment conducted with at least one community member (Y/N/NA)	Process	MOP	Self-report
	Additional post-project assessment completed (date/years post-completion)	Process	MOP	Self-report

Table 3.2
Core Indicators for All Projects, Related to Strategic Objectives

Strategic Objective	Project-Specific Objective	Indicator	Indicator Type	Indicator Family	Data Source
Capacity-building	Capacity of host-nation civilians increased <i>(if applicable)</i>	Project targets transfer of knowledge or skills from DoD to host-nation civilians	Input	MOP	Self-report
		Project implemented in collaboration with host-nation civilian(s) (Y/N)	Process	MOP	Self-report
		Number of host-nation civilians trained during project execution	Output	MOP	Self-report
		Host-nation civilians operate and maintain project/property once project is completed (Likert scale 0–4)	Outcome	MOE	Self-report
	Capacity of host-nation government (nonmilitary) increased <i>(if applicable)</i>	Project targets transfer of knowledge or skills from DoD to host-nation government	Input	MOP	Self-report
		Project implemented in collaboration with host-nation government (nonmilitary) (Y/N) (specify)	Process	MOP	Self-report
		Number of host-nation government (nonmilitary) personnel trained during project execution	Output	MOP	Self-report
		Host-nation government (nonmilitary) operates and maintains project/property once project is completed (Likert scale 0–4)	Outcome	MOE	Self-report
	Capacity of host-nation military increased for civilian benefit <i>(if applicable)</i>	Project targets transfer of knowledge or skills from DoD to host-nation military	Input	MOP	Self-report
		Project implemented in collaboration with host-nation military (Y/N) (specify)	Process	MOP	Self-report
		Number of host-nation military personnel trained during project execution	Output	MOP	Self-report
		Host-nation military operates and maintains project/property once project is completed (Likert scale 0–4)	Outcome	MOE	Self-report
Positive visibility	Project recognized as DoD/USG effort and received positively by the community	Project sends a tangible signal in the host nation, regionally, and globally that DoD and USG respond to humanitarian needs and have an interest in the well-being of those in need	Input	MOP	Self-report
		Project information recognizing DoD and host nation is disseminated in local community (Y/N)	Process	MOP	Self-report
		DoD or other USG representative present at the ribbon-cutting or other ceremony (Y/N/NA) (specify)	Output	MOP	Self-report
		Project includes, where appropriate, some tangible, visible, or substantive marker (e.g., cornerstone, plaque, sign) of both DoD and host-nation involvement, with the host nation in the lead (Y/N/NA) (describe marker or why not applicable/appropriate)	Output	MOE	Self-report

Table 3.2—Continued

Strategic Objective	Project-Specific Objective	Indicator	Indicator Type	Indicator Family	Data Source
Positive visibility (cont.)	Project recognized as DoD/USG effort and received positively by the community (cont.)	Extent to which local community feels project will improve quality of life (Likert scale 0–4)	Outcome	MOE	Poll, local consultation
		Extent to which local community feels the project was responsive to local needs (Likert scale 0–4)	Outcome	MOE	Poll, local consultation
		Degree of favorable impression of the United States (Likert scale 0–4)	Outcome	MOE	Poll
		Extent to which the project changed community opinion about the United States and whether it was in a positive or negative way	Outcome	MOE	Poll, local consultation
Access/influence	Cooperated with host-nation civilians (if applicable)	Project developed in response to explicit host-nation civilian need or request (Y/N) (specify organization[s])	Input	MOP	Self-report
		Project designed in coordination with host-nation civilians (Y/N) (Specify organization[s])	Input	MOP	Self-report
		Host-nation civilians provided information or financial, human, or in-kind resources for the project (Y/N/NA)	Input	MOP	Self-report
	Cooperated with host-nation government (nonmilitary) (if applicable)	Project developed in response to explicit host-nation (nonmilitary) need or request (Y/N) (specify organization[s])	Input	MOP	Self-report
		Project designed in coordination with host-nation government (nonmilitary) official (Y/N) (specify organization[s])	Input	MOP	Self-report
		Host nation provided information, financial, human, or in-kind resources for project (Y/N/NA)	Input	MOP	Self-report
	Cooperated with host-nation military for civilian benefit (if applicable)	Project developed in response to explicit host-nation military need or request (Y/N) (specify organization[s])	Input	MOP	Self-report
		Project designed in coordination with host-nation military officials (Y/N) (specify organization[s])	Input	MOP	Self-report
		Host-nation military provided information or financial, human, or in-kind resources (Y/N/NA)	Input	MOP	Self-report
	Project enhanced host-nation government's legitimacy among the public	At least one host-nation government official (military or nonmilitary) present at the groundbreaking or ribbon-cutting ceremony (Y/N)	Output	MOP	Self-report
		Project outputs are operated, maintained, or managed by the host-nation government (military or nonmilitary) (Y/N/NA)	Outcome	MOE	Self-report

NOTE: The Likert scale assesses level of agreement with a statement. Here, 0 = not at all, 1 = small amount, 2 = medium amount, 3 = large amount, and 4 = completely.

Indicators Related to Specific HA Project Types

Indicators specific to different types of HA projects are presented in Tables 3.3 through 3.7, using the same format as was used for the core indicators. The five main types of HA projects currently undertaken by COCOMs are described below, with examples of each.

- *Water and sanitation projects:* The majority of water and sanitation projects focus on building wells. Water treatment projects that usually have the objective of increasing or improving potable water also fall into this category. These projects have been proposed and implemented across COCOMs. In other development contexts, the construction of toilet facilities and latrines, solid waste disposal areas, and projects to improve community drainage are also considered water and sanitation projects. Indicators for each of these types of projects are presented in Table 3.3.
- *Health infrastructure projects:* Health infrastructure projects include the construction or refurbishing of existing health care facilities (e.g., hospitals, clinics). These construction projects have been undertaken by all COCOMs. Indicators for this type of project are presented in Table 3.4.
- *Nonhealth infrastructure projects:* Nonhealth infrastructure projects include the construction or refurbishing of schools, roads, orphanages, community centers, women's centers, and warehouses or any other type of construction project. All these nonhealth infrastructure projects have been implemented by one or more COCOMs. Indicators for this type of project are presented in Table 3.5.
- *Health services projects:* Health services projects have traditionally been supported primarily by Humanitarian and Civic Assistance—not HA OHDACA—funds. However, more HA funds may be provided for medical service provision in the future, including emergency or disaster-related medical care or, possibly, direct clinic or hospital care in high-need areas or training of health personnel. The proportion of health services projects is expected to grow in the coming years. Indicators for this type of project are presented in Table 3.6.
- *Disaster-related projects:* As discussed earlier, disaster-related projects generally overlap with one of the previously mentioned categories but are typically associated with one or more phases in the disaster cycle: preparedness, response, or recovery and reconstruction. These projects may include developing disaster-resistant shelters or other structures, building warehouses for emergency supplies, building drainage areas for flood control in low-lying areas, or the provision of emergency medical care immediately following a disaster. Indicators for this type of project are presented in Table 3.7.

Table 3.3
Water and Sanitation Project Indicators

Strategic Objective	Project-Specific Objective	Indicator	Indicator Type	Indicator Family	Data Source
Humanitarian impact	Access to improved source of drinking water enhanced <i>(if applicable)</i>	Number and location of potable water sources created	Output	MOP	Self-report, geocoded data
		Well built to relevant local (and international or national, as appropriate) standards (Y/N)	Output	MOP	Self report
		Well built in a way that enables local maintenance over time (Likert scale 0–4)	Output	MOP	Site inspection
		Number of people obtaining water from source daily, divided by number of people living within 500 m or a 10-minute walk of safe drinking water source	Outcome	MOE	Site inspection and/or household survey
	Water quality enhanced <i>(if applicable)</i>	Drinking water from source(s) created by project is nonturbid by inspection ^a (Y/N)	Outcome	MOE	Site inspection
		Number of fecal coliforms per 100 ml at distribution point	Outcome	MOE	Chemical test
		Number of fecal coliforms per 100 ml at point of use	Outcome	MOE	Chemical test
	Access to excreta disposal facilities increased <i>(if applicable)</i> ^b	Number of latrines dug or other excreta disposal facilities created	Output	MOP	Self-report
		Number of people using excreta disposal daily, divided by number of people living within 50 m of adequate excreta disposal	Outcome	MOE	Self-report
		Excreta disposal facility created meets relevant local (and international or national, as appropriate) standards of quality (Y/N)	Outcome	MOE	Self-report
		Excreta disposal facility built in a way that enables local maintenance over time (Likert scale 0–4)	Output	MOP	Site inspection
Capacity-building	Community members' skills in water/sanitation maintenance improved	Number of community members trained in water pump or latrine/excreta disposal maintenance	Output	MOP	Self-report
		Number of community members trained to monitor water quality	Output	MOP	Self-report
		Trained community member(s) maintain water pump or latrine, as required (Likert scale 0–4)	Outcome	MOE	Site inspection
		Trained community member(s) monitor water quality as required (Likert scale 0–4)	Outcome	MOE	Site inspection

NOTE: The Likert scale assesses level of agreement with a statement. Here, 0 = not at all, 1 = small amount, 2 = medium amount, 3 = large amount, 4 = completely.

^a Nonturbid: Clear, not cloudy, could read a book or newspaper through a tube of water.

^b For other types of sanitation projects, such as solid waste disposal or community drainage, other indicators will be required. See the section "Choosing or Developing Additional Indicators to Fill Project-Specific Assessment Gaps," later in this chapter.

Table 3.4
Health Infrastructure Project Indicators

Strategic Objective	Project-Specific Objective	Indicator	Indicator Type	Indicator Family	Data Source
Humanitarian impact	Health care infrastructure improved	Clinic is built or renovation complete (Y/N)	Output	MOP	Self-report
		New or renovated facility meets relevant local (and international or national, as appropriate) building codes or standards (Y/N)	Output	MOP	Site inspection
		Facility built in a way that enables local maintenance over time (Likert scale 0–4)	Output	MOP	Site inspection
		Clinic is open and being used as intended (Likert scale 0–4)	Outcome	MOE	Site inspection, records
		Number of people using the new or renovated facility, divided by number of people living within 5 km or 1 hour of the facility	Outcome	MOE	Site inspection, records
Capacity-building	Community members' skills improved	Number of community members trained in construction through the project	Output	MOP	Self-report

NOTE: The Likert scale assesses level of agreement with a statement. Here, 0 = not at all, 1 = small amount, 2 = medium amount, 3 = large amount, 4 = completely.

Table 3.5
Nonhealth Infrastructure Project Indicators

Strategic Objective	Project-Specific Objective	Indicator	Indicator Type	Indicator Family	Data Source
Humanitarian impact	Community infrastructure improved	Facility is built or renovation complete (Y/N)	Output	MOP	Self-report
		New or renovated facility meets relevant local (and international or national as appropriate) building codes (Y/N)	Output	MOP	Site inspection
		Facility built in a way that enables local maintenance over time (Likert scale 0–4)	Output	MOP	Site inspection
		Facility is open and being used as intended (Likert scale 0–4)	Outcome	MOE	Site visit, records
		Number of people using the new or renovated facility, divided by number of people living within 5 km or 1 hour of facility ^a	Outcome	MOE	Site visit, records
Capacity-building	Community members' skills improved	Number of community members trained in construction through the project	Output	MOP	Self-report

NOTE: The Likert scale assesses level of agreement with a statement. Here, 0 = not at all, 1 = small amount, 2 = medium amount, 3 = large amount, 4 = completely.

^a Relevant to facilities serving the public, such as schools, food distribution centers, women's centers, or community centers.

Table 3.6
Health Services Project Indicators

Strategic Objective	Project-Specific Objective	Indicator	Indicator Type	Indicator Family	Data Source
Humanitarian impact	Access to essential health services increased	Health services provided are the most appropriate and effective available in the country and appropriate for the level of facility (Likert scale 0-4)	Outcome	MOE	Site survey
		Percentage of community members with access to the health services within 5 km or 1 hour travel time	Outcome	MOE	Site inspection
		Number of persons receiving services in past month	Outcome	MOE	Facility records
		Referral system is in place and operates effectively (Likert scale 0–4)	Outcome	MOE	Site inspection, records
Capacity-building	Community capacity to provide health care services improved	Local health workers are integrated into the service provision to the extent possible, accounting for gender and ethnic balance (Likert scale 0–4)	Outcome	MOE	Self-report, local consultation
		Ratio of health care providers to population: Number of trained health care providers at the project-related facility or facilities <i>divided by</i> population size <i>multiplied by</i> 100,000 = ratio of providers per 100,000 population	Outcome	MOE	Records

NOTE: The Likert scale assesses level of agreement with a statement. Here, 0 = not at all, 1 = small amount, 2 = medium amount, 3 = large amount, 4 = completely.

Table 3.7
Disaster-Related Project Indicators

Strategic Objective	Project-Specific Objective	Indicator	Indicator Type	Indicator Family	Data Source
Humanitarian impact	Disaster preparedness improved (if applicable)	Major disaster risks determined (Y/N/NA)	Input	MOP	Self-report
		Areas most at risk determined (Y/N/NA)	Input	MOP	Self-report
		Disaster response plan developed (Y/N/NA)	Output	MOP	Self-report
		Number of structures rebuilt, relocated, or retrofitted to be disaster resistant	Output	MOP	Site inspection
		Disaster-resistant structures located in places to best avoid or withstand disaster (Y/N/NA)	Output	MOP	Site inspection
		Number of structures (e.g., hospitals, schools) with sufficient backup water and power	Outcome	MOE	Site inspection
	Disaster response effectively coordinated (if applicable)	There is effective coordination and exchange of information among those affected by or involved in the disaster response (Likert scale 0–4)	Process	MOP	Site inspection
	Disaster recovery achieved (if applicable)	Contact, trade, and transport reestablished between disaster-affected rural areas and markets for products, labor, and services (Y/N/NA)	Outcome	MOE	Site inspection, records
Capacity-building	Disaster-related capacity improved	Project fills previously identified gap in disaster management (i.e., preparedness, response, recovery) (Likert scale 0–4)	Output	MOP	Self-report
		Disaster response plan developed in collaboration with relevant project personnel or volunteers (Y/N/NA)	Output	MOP	Self-report
		Number of personnel or volunteers trained to implement disaster response plan	Output	MOP	Self-report
		Number of personnel or volunteers trained to maintain disaster-resistant structures	Output	MOP	Self-report
		Trained personnel or volunteers maintain disaster-resistant structures, as required (Likert scale 0–4)	Outcome	MOE	Site inspection

NOTE: The Likert scale assesses level of agreement with a statement. Here, 0 = not at all, 1 = small amount, 2 = medium amount, 3 = large amount, 4 = completely.

Choosing or Developing Additional Indicators to Fill Project-Specific Assessment Gaps

For many HA projects, the required indicators presented in this chapter should be sufficient for measuring project effectiveness. In some cases, however, there may be a unique set of project objectives or activities that are not captured by the core indicators or those related to specific HA project types. Alternatively, a particular HA project may not fall neatly into one of the project types (e.g., water and sanitation, health infrastructure) outlined here. In such cases, it will be important to supplement the required MOE and MOP indicators with indicators that reflect the project's effectiveness relative to its specific, unique objectives.

There are key characteristics of good indicators that, if used as guidance, will help ensure that indicators are both usable and valuable. These characteristics are described in detail in this section. There are many existing M&E resources that can be helpful in identifying appropriate indicators for many different types of projects. The section “Resources for Identifying Additional Indicators,” later in this chapter, provides a list of relevant resources for this purpose.

Characteristics of Good Indicators

What are good indicators? Collectively, good indicators are specific, measurable, appropriate, reliable, and timely. These SMART criteria are summarized in the box below.

- Is the indicator **specific**?
 - Does the indicator clearly measure progress toward the result?
 - Is it clear what data should be collected?
- Is the indicator **measurable**?
 - Can the necessary information be obtained?
 - Are changes in the indicator verifiable by others or through other means?
- Is the indicator **appropriate**?
 - Does the indicator sufficiently capture project progress and results?
 - Are the time and cost requirements for data collection reasonable?
 - Will the set of data be useful to others up the chain of command?
- Is the indicator **reliable**?
 - Is the indicator neutral and not distorted by value judgments?
 - Is the indicator able to reflect changing circumstances or situations (both positive and negative)?
 - Is there agreement on how the indicator should be interpreted?
- Is the indicator **timely**?
 - Can the indicator be collected in a reasonably timely fashion?

Since food aid and food security are generally not priorities for OHDACA-funded HA projects, they are not specifically covered in this handbook. Thus, an OHDACA project that focuses on this area will require indicators not included in the handbook. As an example, consider an indicator for general nutritional support taken from the Sphere Project's standards for nutrition. Next, we describe how one might determine how well this indicator meets the SMART criteria as a model for how other potential indicators should be assessed.

- The objective for general nutritional support: The nutritional needs of the population are met.
- The indicator being evaluated: Number of people with access to foods that meet intake requirements of 2,100 kilocalories per person per day.

The first question is whether the indicator is **specific** enough to measure progress toward the result. In this example, the higher-order goal is to meet the nutritional needs of the population. Because this indicator reflects caloric intake, it is directly related to improving the nutritional needs of the population. Measuring change based on this indicator will reflect changes caused by the project. It measures only one specific outcome. If protein intake were also a factor, another indicator for the percentage of calories from protein might be implemented. While there are other indicators that provide a more sophisticated picture of community nutrition that could be added, caloric intake could stand alone as a single specific indicator for community nutritional status if necessary. The caloric intake indicator is also unambiguous. Most development researchers would understand what data should be collected for this indicator and what it intends to measure. The use of a target of 2,100 kilocalories, suggested by the Sphere Project's standards, ensures that the measure will be as precise as possible, depending on how data are collected.

The second set of questions considers whether the indicator is **measurable**. That is, can the necessary information be obtained? If calorie-specific foodstuffs are being provided, then the caloric content of those foods can be determined directly—whether or not individuals are receiving 2,100 kilocalories can be easily measured. If not, having respondents provide an account of foods consumed and calculating caloric intake from that would be an appropriate proxy, and approximate kilocalorie intakes can be used instead. Another feature of a measurable indicator is that changes in the variable can be verified by others or through other means. In this case, comparing nutritional intake data with data collected by other organizations working on nutritional projects or conducting research in the area, or comparing respondents' accounts to the known caloric content of the food being provided, would help determine whether the caloric intake being measured by the indicator is correct. The 2,100-kilocalorie benchmark can be checked against other sources.

The third set of questions concerns how **appropriate** the indicator is. For a food distribution program, the first priority is to ensure that community members are eating enough calories to sustain themselves. Thus, measuring the number of calories taken in and comparing that to the 2,100-kilocalorie target would be an appropriate measure of project progress and results. The indicator itself is an outcome measure, which can be collected at baseline, completion, and one-year follow-up. As mentioned earlier, these data can be collected in a variety of ways, each with different resource, time, and cost requirements. The method of data collection should be acceptable with respect to resources, time, and cost. For direct food distribution, the additional costs would be fairly minor. For an intake recall study, conducting a household or community study may be more or less expensive than the project's budget can bear. That decision must be made in the context of the project itself. Further, the timing of data collection should allow project managers to communicate results to superiors when necessary. It is most useful if the caloric intake data can be collected, analyzed, and summarized for superiors at a time when the data can be used effectively. If resources, time, or costs of data collection exceed the project assessment budget, or if the data would not be ready when needed by superiors, then the indicator would not be useful.

The fourth set of questions considers whether an indicator is **reliable**. The indicator should be considered objective and should be tested in many contexts. Because this indicator, 2,100-kilocalorie intake per day, is suggested by the Sphere Project, it has been reviewed and tested in a variety of food distribution contexts. There should also be agreement on how the indicator should be interpreted. The indicator must be equally able to represent more and

less successful (positive and negative) outcomes, regardless of whether the data are collected from the entire population or a subgroup of the population. This indicator of caloric intake is not biased for or against any population or subpopulation, and the target of 2,100 kilocalories means that positive (2,100 kilocalories or above) and negative (less than 2,100 kilocalories) results can be reported with this indicator. The indicator should have no “built-in” value judgment; this measure does not favor any particular project. That is, the indicator doesn’t assume that the project will be successful or measure “how successful” the specific project was. Further, the indicator should be able to record changing circumstances associated with the project. Because the indicator is a direct measure of caloric intake, if extenuating circumstances lead to decreased caloric intake within a population, this indicator will reflect the change and the data can be explained by contextual factors. With these characteristics, the indicator is as objective and reliable as possible.

The fifth question is whether the indicator is **timely**: Can the needed information be collected within a reasonable amount of time (not posing undue burden) and as close to project-related time frames as possible? If not, then it is probably not a good choice, even though it might be acceptable in every other way. In the case of caloric intake, data can be collected immediately or within 24 hours of food distribution, if necessary. This is a reasonable amount of time and very close to project-related time frames, regardless of whether intake is measured directly or by intake recall.

Resources for Identifying Additional Indicators

In addition to the human resources available through USAID and university faculty and students in the host nation, there are numerous reference groups, projects, and documents that can be valuable in identifying appropriate indicators. The following list of resources will be useful if it becomes necessary to identify new indicators for HA projects:

1. *The Sphere Project*: The primary focus of the Sphere Project is disaster response, but its standards and indicators are applicable in nondisaster contexts as well. The project includes standards and indicators for capacity-building; water sanitation and hygiene; food security, nutrition, and food aid; shelter, settlement and nonfood assistance; and health services (<http://www.sphereproject.org>).
2. *U.S. Department of State, Bureau of Population, Refugees, and Migration*: In 2007, this office published a standard “basket of indicators,” which included food security, nutrition, and food aid; water, sanitation, and hygiene promotion; health; shelter, settlement, and nonfood assistance; education; and self-sufficiency. Copies can be obtained by visiting <http://www.state.gov/g/prm>.
3. *Core Group*: This is a collaborative of more than 50 NGO partners supported by USAID whose goal is improving maternal, child, and community health. Its working group provides basic information on M&E and recommends standard indicators for projects that focus on social and behavioral change, HIV/AIDS, malaria, tuberculosis, nutrition, safe motherhood and reproductive health, and integrated management of childhood illness (<http://www.coregroup.org>).
4. *Prevention Consortium*: The focus of this consortium is community-based disaster prevention and preparedness. Its resources may be helpful in designing disaster-focused

projects and identifying related indicators (<http://www.proventionconsortium.org/?pageid=4>).

5. *United Nations International Strategy for Disaster Reduction (ISDR)*: The UN's ISDR Secretariat focuses on disaster reduction. Its mission is "building disaster resilient communities by promoting increased awareness of the importance of disaster reduction as an integral component of sustainable development, with the goal of reducing human, social, economic and environmental losses due to natural hazards and related technological and environmental disasters" (<http://www.unisdr.org>). Resources and publications can be found at <http://www.unisdr.org/publications>, and a guide to indicators can be found at http://www.unisdr.org/eng/about_isdr/isdr-publications/15-indicator-of-progress/Indicators_of_Progress_HFA.pdf.
6. *Food and Nutrition Technical Assistance II Project (FANTA-2)*: This technical assistance group supported by USAID focuses on the entire range of food-assisted development projects and provides indicators for many types of projects, including emergency and humanitarian response, water and sanitation, urban food security, women's health and nutrition, microcredit, and HIV/AIDS. Its M&E guidance is applicable across all types of humanitarian assistance projects (<http://www.fantaproject.org/focus/monitoring.shtml>).
7. *MEASURE Evaluation project*: This USAID-sponsored technical assistance group works to improve the capacity of NGOs and host-country programs to measure progress in HA projects focused on health, population, and poverty (<http://www.cpc.unc.edu/measure>). MEASURE has an extensive collection of publications describing how its tools have been applied; these publications can be found at <http://www.cpc.unc.edu/measure/publications>. The full set of tools, including indicators, can be found at <http://www.cpc.unc.edu/measure/tools>.
8. *International Fund for Agricultural Development*: This UN agency was established after the 1974 World Food Conference and is dedicated to eradicating rural poverty, largely through agricultural research. The agency's evaluation office has created a very good guide to project M&E (<http://www.ifad.org/evaluation/guide>). The agency has also developed a comprehensive results and impact management framework (with software) that focuses specifically on rural development projects and indicators for such projects: <http://www.ifad.org/operations/rims>.
9. *Organisation for Economic Co-Operation and Development*: The Development Co-Operation Directorate uses a "managing for development results" framework, with a focus on using indicators to determine progress (<http://www.oecd.org/dac>). The directorate's evaluation-focused website is <http://www.oecd.org/dac/evaluationnetwork>, and resources can be found at <http://www.oecd.org/dac/evaluationnetwork/derec>.
10. *World Bank Independent Evaluation Group*: This group works to improve development outcomes by improving evaluation. Its website contains extensive information about conducting evaluations and many tools for use in evaluation contexts, particularly for capacity-building (<http://www.worldbank.org/ieg>).
11. *Monitoring, Evaluation and Learning for Fragile States and Peacebuilding Programs*: This toolkit, whose subtitle is "Practical Tools for Improving Program Performance and

Results,” was developed in 2005 by Social Impact, Inc. with support from USAID’s Office of Transition Initiatives. It provides a strong introduction to indicator-driven M&E and presents indicators of social change in such areas as mitigating conflict, media and outreach, advocacy, local governance, reintegration of excombatants, and organizational capacity-building. It also includes descriptions of methods suggested for data collection and detailed examples of their implementation (http://www.usaid.gov/our_work/cross-cutting_programs/transition_initiatives). The toolkit can be found at <http://www.socialimpact.com/resource-center/downloads/fragilestates.pdf>.

Additional Tips for Assessing Humanitarian Assistance Projects

Proxy Indicators

Because some direct measures are difficult or expensive to obtain, indirect measures—or proxy indicators—have proven quite useful. The following are some examples of proxy indicators from conflict situations in which such indicators have been necessary:

- *Tax revenues:* In Afghanistan, where the economy is largely drug-oriented, tax revenues should reflect the legitimate economy. Thus, increases in tax revenues suggest both the reach of the government and the growth of the legitimate economy.
- *Number of children in school:* This indicator can reflect whether people feel that it is safe enough to send their children to school or whether girls have more time to attend school because they are no longer required to spend a large portion of the day gathering water.
- *Markets open and people shopping:* This indicator shows both that people feel safe enough to shop and that there is enough security for that level of economic activity to occur.

Avoiding Bias

How data are collected depends on the data needed. One key issue is to avoid systematic distortion, or bias. Biased information can be misleading. Common sources of bias are talking only to men, talking only to adults, talking to only one ethnic group, talking only to people in safe neighborhoods, and talking only to local officials (who may or may not *represent* local citizens). In some places, schools may provide counts of students that include only boys. Whole studies have been published on conflict zones with a footnote stating that the data were collected only in “safe” neighborhoods, so they probably did not provide the best reflection of reality. There are many sources of bias that relate principally to researchers, informants, and data-collection tools and techniques. These types of bias are described in greater detail in Appendix B. When developing or collecting indicators as part of project assessment, it is important to recognize the potential for and try to avoid sources of bias.

General Tips for Avoiding Bias in Project Assessments

1. Listen carefully.
Sometimes, project team members go into the field so focused on promoting their own ideas that they leave little time for community members to provide feedback. Talk less, and listen more—particularly with respect to needs.
2. Be humble.
Sometimes, project team members believe that their personal knowledge of the situation is more valuable or reliable than others' input. This makes community members or other key stakeholders feel as if their opinions don't count. Encourage participation and openly discuss the value of everyone's perspective.
3. Let people speak for themselves.
When measurement includes community consultation, interviews, or surveys, be sure to let respondents speak for themselves. In some situations, project team members are reluctant to hand over control to their respondents. During a survey, they ask the questions and record respondents' answers rather than allowing each respondent to read the survey and respond on his or her own. This sort of power differential does not encourage honest feedback. When possible, let community members take control of their own answers. This may require translation into the local language and pretesting for literate populations; such an approach is not feasible for nonliterate populations.
4. Keep an open mind.
Never assume that you know the project results before you conduct the project assessment. Project team members, because they have a sense of ownership of the project, often know what kinds of results are needed to show success—and sometimes steer responses in that direction. This is dishonest and doesn't allow for learning, improvement, or honest appraisal of project success or contribution to improved well-being in a community. Avoid it at all costs.

PART II

Step-by-Step User's Guide for Project Assessment

This user's guide presents step-by-step guidance for planning and implementing HA project assessments, from beginning to end. It follows the project cycle of planning, start-up, execution, completion, and follow-up, presented in Figure 1.1 in Chapter One of the M&E Primer (Part I of this handbook). Eleven steps are presented as part of a primarily continuous sequence, categorized according to the phase in the project cycle during which they occur. A summary of the project assessment steps is presented in Table 1 as a preview of the step-by-step process detailed in the remainder of this guide. The goal of this guide is to offer a brief description of each step, tools to help organize and complete the steps, and tips for getting good information easily and effectively. For further details or an explanation of any of the steps, refer to the M&E Primer.

Planning the Project Nomination

The project itself must be planned before an assessment plan can be designed. This section describes the four main steps involved in planning the project nomination, including the use of planning tools, where applicable.

1. Consult with Relevant Counterparts to Establish Needs

The first step for planning any project is to consult with relevant counterparts to determine needs and, thus, inform the development of project objectives. Such counterparts include other members of the country team (e.g., from the Department of State or USAID), as well as appropriate representatives of the host nation, such as the host-nation military; other government agencies at the national, provincial or local levels; and local civilians or civilian organizations. The best project is one that evolves from an unmet need from one or more of these groups and involves them in the planning of the project. For example, what are the unmet needs as determined by USAID, United Nations agencies, and the host nation? What are the unmet needs for the most vulnerable sections of the population? What resources and expertise can DoD

Table 1
Summary of Steps for Planning and Carrying Out HA Project Assessments

Project Cycle Phase	Project Assessment Activities
Planning the project nomination	Consult with relevant counterparts to establish needs. Design the project: Define the project objectives and then the desired outcomes, outputs, activities, and inputs. Identify MOPs and MOEs. Develop the timeline and budget for the project.
Planning the tactical details of project assessment	Determine information-gathering methods. Plan the logistics for project assessment.
Start-up: baseline measurement	Collect selected baseline measurements (MOEs).
Execution	Monitor inputs, processes, and outputs and take corrective action, as needed.
Completion	Collect output and outcome indicators after the project is completed. Communicate results.
Follow-up	Collect outcome indicators one year after the project is completed, and communicate results.

uniquely provide to address these needs? What areas of need fall below relevant national or international standards?

Consultation and coordination with USAID and Department of State counterparts—DoD’s HA activities usually overlap with USAID and Department of State development strategies—are important to prevent duplication of effort and to ensure the most effective use of U.S. government resources. Working alongside host-nation counterparts helps build capacity, an important strategic objective for HA work. It also increases the likelihood that host-nation representatives or community members will feel that DoD or its representatives are responsive to their needs, which is likely to contribute to DoD’s strategic objectives of access and influence. Finally, host-nation involvement is key to enhancing the legitimacy of the host-nation government and other civilian organizations in the eyes of the public, an important component of security cooperation.

2. Design the Project: Define the Project Objectives and Then the Desired Outcomes, Outputs, Activities, and Inputs

This step involves working through the objective tree provided as a blank template in Worksheet 1 and described in more detail in Chapter Two of the M&E Primer. An objective tree helps articulate project objectives (i.e., desired project outcomes); the inputs, processes, and outputs that are both necessary and sufficient for achieving those objectives; and higher-order program and strategic objectives (i.e., impacts) to which the project-level objectives contribute. The number of branches of the objective tree should be tailored to the scope of the project being planned. Include as many as necessary, but be careful to define a manageable number. Assuming, for illustrative purposes, that increasing access to clean water is the main objective of a project (i.e., the desired outcome), the objective tree would be completed by working down from that project objective to determine *how* it can be achieved through various necessary inputs, activities, and outputs, and by working up from the objective to determine *why* the project objective is important for achieving higher-order strategic objectives (i.e., impacts). Worksheet 1 also includes space for naming indicators (measures of performance [MOPs] or measures of effectiveness [MOEs]) associated with each planned input, process, output, outcome, and impact. Identifying appropriate MOPs and MOEs is discussed in step 3.

3. Identify Measures of Performance and Measures of Effectiveness

As shown in Figure 1, MOPs refer to input, process, and output indicators, and MOEs refer to outcome indicators. Once the objective tree is completed, it will be important to ensure that all inputs, processes, outputs, and outcomes are adequately addressed by at least one indicator each. The template in Worksheet 1 also includes space for indicators associated with each element of the objective tree.

All HA projects will require the collection of MOPs (input, process, and output indicators) and MOEs (outcome indicators) to assess achievement of both tactical (project-level) objectives and strategic-level objectives (e.g., access or influence, capacity-building, positive visibility). Most of the necessary MOPs and MOEs for HA projects are provided in Worksheets 2 through 8, which can be found at the end of this user’s guide. The indicators are divided into three major categories. **Project management indicators** (Worksheet 2) reflect different aspects of performance and collaboration with other USG agencies, since national and military policy often require interagency cooperation (e.g., in stability operations). The standard project management indicators presented in Worksheet 2 should be collected for all

HA projects. **Core indicators**, presented in Worksheet 3, should also be collected for all HA projects. Core indicators reflect higher-order DoD strategic objectives (e.g., access, influence, capacity-building) to which all DoD HA projects should contribute to some extent. **Indicators related to specific project types** (Worksheets 4 through 8) reflect typical project objectives for the most common types of OHDACA-funded HA projects: water and sanitation (Worksheet 4), health infrastructure (Worksheet 5), nonhealth infrastructure (Worksheet 6), health services (Worksheet 7) and disaster-related initiatives (Worksheet 8). These indicators should be collected only for HA projects of that respective type. Tables 3.2 through 3.7 in Chapter Three of the M&E Primer (Part I of this handbook) provide a more detailed mapping of indicators in the worksheets to project- and strategic-level objectives.

Often, project planners will want to supplement the indicators provided in the worksheets with those that reflect their own unique project objectives. When the completed objective tree (Worksheet 1) indicates that additional indicators are warranted, new indicators should be added to fully reflect what the project is trying to achieve. The section “Characteristics of Good Indicators” in Chapter Three of the M&E Primer describes how HA planners can develop new indicators using SMART (specific, measurable, appropriate, reliable, and timely) criteria; the subsequent section provides resources to assist HA project planners in finding relevant existing indicators. Sometimes, it is impossible to gather direct indicators for a project outcome. In such cases, it may be necessary to identify appropriate indirect, or **proxy indicators**, associated with such an outcome. Chapter Three of the M&E Primer also provides a more detailed description of proxy indicators. Good planning and a wise choice of indicators during project development will facilitate the entire project assessment process that follows.

4. Develop the Timeline and Budget for the Project

As always, a budget and timeline must be developed for the project as part of the project nomination process. When developing the project budget and timeline, it is important to factor in the time and resources required for project assessment. More detailed guidance on planning for project assessment, including timeline and budgets, is presented in step 6.

Planning for the Tactical Details of Project Assessment

Once the project itself has been designed, the planning for project performance and outcome monitoring must be completed. The following two steps address the process for planning the tactical details of project assessment.

5. Determine Information-Gathering Methods

The most appropriate methods for collecting assessment information should be based on the context, objectives, and, to a lesser extent, the size of the study. Sometimes (as suggested in the worksheets at the end of this user's guide and in Chapter Three of the M&E Primer), there is one main data source or method for collecting a particular MOP or MOE. In other instances, especially for some MOEs, there are different approaches. The methods themselves can be qualitative or quantitative. Here, the distinction is that qualitative data collection results in text-based data—for example, a simple “yes,” “no,” or “not applicable” with an accompanying explanation—while quantitative data collection includes counts, percentages, or other numbers. The data source to be used for collecting MOP and MOE indicators is included for

each standard indicator in Worksheets 3 through 8. For project-specific indicators, the source of data collection should be filled in under the worksheet's "data source" column.

Next, each of the different methods for gathering data is briefly explained. The sequencing of the methods is roughly in increasing order of complexity and cost.

- *Self-report:* Many MOPs relate to the processes associated with project planning, execution, and assessment and are a simple matter of answering "yes," "no," or "not applicable"; some require brief descriptions (e.g., an explanation of problems encountered, how they were resolved or why they were not resolved, which U.S. government agencies other than the State Department or USAID were involved in the project planning).
- *Records:* Some indicators are based on facility records, such as clinic records documenting the number of patient visits.
- *Chemical test:* This method applies only to certain types of projects, for example, projects that aim to create a safe drinking water supply, in which chemical testing is used to objectively measure water quality.
- *Site inspection:* This method involves an on-site visit to the project area to directly observe elements associated with one or more indicators (e.g., that a well was built; a facility is operational and being used as intended; the well or facility meets relevant local, national, or international standards; trained personnel are maintaining the well or facility as planned).
- *Local community consultation:* Consultations are usually carried out in the project area with relevant community leaders, beneficiaries of the project's outputs, or others. The questions posed to individuals during interviews or discussed with a focus group are the relevant indicators. For example, is the host nation (military, nonmilitary, or other civilian organization) willing to sustain the project post-completion? Does it have the capacity to do so (and what is the evidence for this)? Is the project supported by the local community? How does the community view the quality of services? How can services be improved? Is DoD viewed favorably by the local community? Additional tips for good community consultations are presented in Appendix A.
- *Local community minisurvey or poll:* For projects that are large or in project areas where surveying or polling is already taking place (for example, by the State Department for public diplomacy purposes), a local survey or poll can provide quantitative information that may be more objective than qualitative information and that may facilitate comparison over time and across projects and countries. A local survey can be administered by the HA project overseer or a contractor, such as a local university or other technical contractor. Another option may be to add questions that are relevant to the specific HA project to a larger survey in the area, such as one that the State Department may be carrying out, if appropriate. It is always important to target a large enough sample to ensure statistical significance based on estimated prevalence and desired precision and to use appropriate sampling techniques.

The specific steps for conducting minisurveys or polls are listed in Social Impact, Inc.'s, *Monitoring, Evaluation, and Learning for Fragile States and Peacebuilding Programs* toolkit.¹ They are, briefly, as follows:

- Plan and get buy-in for the survey (for example, identify a local university or other contractor to administer the survey or an ongoing survey to which study-specific questions can be added).
- Design the questions (use the relevant indicators—MOPs/MOEs—as a guide).
- Translate and pretest (depending on the context, pretesting the questions may not be necessary or practical).
- Collect data.
 - Identify the sampling frame: Determine the community from which to draw the individuals to be surveyed, the number of individuals to be surveyed, and how they will be selected.
 - Determine logistics: By whom, when, where, and how will the survey interviews be completed?
 - Consider biases (see Appendix B): Try to ensure that the individuals surveyed are a reasonable representation of the community of interest and are not selected in a way that may skew results. For example, it is often important to conduct interviews with both males and females, all relevant age and ethnic groups, and all relevant socioeconomic levels; the survey sample size will need to be larger if measuring statistical differences among subgroups is the goal.
- Analyze data. Plan in advance and then carry out the analyses, for example, by mapping the frequency distribution of responses or responses by gender, age, ethnicity, or socioeconomic group. Relevant statistical tests, such as chi-square, should be used to assess statistical significance.
- Present findings (in a written report or designated DoD system).

6. Plan the Logistics for Project Assessment

Logistics for project assessment involve several related activities:

Timeline. To ensure that project assessment data can be used most effectively for both the project and any related higher-order evaluations, it is important that there is a clear link between when indicators will be collected and the project timeline. It is also important to ensure that superiors have an opportunity to review the assessment data before accepting another round of proposed projects.

The project timeline will be the primary determinant of the timing of data collection for monitoring purposes. However, other factors may drive the timeline for project assessment: Does the COCOM HA manager or OHDACA program have a regular reporting requirement? Are there established schedules of inspection visits, of which this might be a small part? When will the data be used? Even the best monitoring data are irrelevant if they come in too late to be useful.

Responsible Party. The in-country HA project manager is responsible for completing project assessment. However, others (for example, from USAID, an NGO, or a local univer-

¹ Social Impact, Inc., *Monitoring, Evaluation, and Learning for Fragile States and Peacebuilding Programs*, Arlington, Va., 2005.

sity) might collaborate to collect monitoring data. Will other U.S. country team members participate? Any host-nation officials? External evaluators? Local university faculty? Before the project starts, it is important to determine whether collaborators will participate in project assessment and, if so, exactly how. Worksheets 2 through 8 all provide a column for indicating who is responsible for collecting indicator information, and this column should be filled out when planning for project assessment.

Relevant Skills. It is in everyone's best interest to ensure that the people involved in the assessment have the basic skills they need. While counting the number of people visiting a well may not be difficult, it must be done consistently, and measuring water quality or flow from a well may require some training to ensure that data are collected correctly. It is important that those involved in project assessment know how to collect the required data.

Data Entry. Having a clear idea of how the data will be entered before they are collected will make data collection easier and more efficient. No matter who *collects* the MOPs and MOEs, the person responsible for *storing* the information will almost certainly be a DoD staff member at the country or COCOM level. Worksheets 2 through 8 presented at the end of this user's guide and included in editable format on the accompanying CD provide at least an initial format for recording and storing project assessment indicators. Worksheets can be printed out and carried into the field for the handwritten recording of information; later, the information can be captured more permanently by entering it into the Overseas Humanitarian Assistance Shared Information System (OHASIS).

Resource Planning for Project Assessment. The collection of MOPs and MOEs requires time, effort, and money. Without data from MOPs and MOEs, project managers and country teams will never be truly informed about the results of their projects and, thus, unable to learn from successes and failures. It is important to plan for collecting, analyzing, and reporting project MOPs and MOEs in terms of time, effort, and funding. Planning in advance could include allocating resources to hire external personnel or strategies to collaborate in ongoing M&E efforts of USG colleagues when their assessments can cover existing project activities.

Project Start-Up: Baseline Measurement

7. Collect Selected Baseline Measurements (MOEs)

As explained in Chapter One of the M&E Primer, it is important to collect certain baseline measures before the project is undertaken. Specifically, with very few exceptions, all outcome-specific MOEs should be measured both before and after project execution so that changes produced by the project and the maintenance of those changes can be documented. Data from baseline measurements should be collected and entered into the applicable indicator worksheets. It is useful to include any observations of project-specific circumstances (e.g., natural disasters, political schisms) that may affect project execution and project effectiveness before the project commences. In some cases, baseline data already exist and can be taken from existing databases maintained by the host nation, USAID, Department of State, or other relevant and reliable source.

Project Execution

8. Monitor Inputs, Processes, and Outputs and Take Corrective Action, as Needed

For relatively small or short-term projects—say, digging one well or a six-month construction project—it may or may not be relevant to monitor project inputs and activities or processes during the project execution phase. Rather, such information can be collected at the time the project is completed. For larger or longer-term projects—multiple wells or a multiyear project—it will almost certainly be appropriate to collect this information during project execution.

When appropriate, MOPs, particularly those associated with completing projects on time and within budget, should be collected during project execution (see Worksheets 2 and 3). Ideally, this information will be collected, recorded, and used in a timely fashion to make any midcourse corrections that may be needed to ensure the best possible project performance and outcomes. Collecting information during project execution often provides a more detailed explanation of successes, constraints, and so on.

The manager overseeing the monitoring of inputs and activities or processes should look not only at the progress of each individual indicator but also at the overall picture. It is not uncommon to make good progress on projects but to see lagging progress in specific project-related activities. Problem solving midway through a project could result in suggestions for overcoming developing constraints. Even if time is too limited to take corrective action during a given project, these findings can become important lessons learned for other projects.

Project Completion

9. Collect Output and Outcome Indicators Immediately After the Project Is Completed

Data should be collected immediately following project completion and again one year later. Longer-term follow-up may be required or desired for larger or more significant projects, and some country teams choose to conduct formal or informal long-term follow-up of smaller projects after more than one year. Output indicators (MOPs) are collected upon project completion and reflect the final step of project execution—what is actually produced by the project. Outcome indicators (MOEs) are collected at baseline, upon project completion, and one year later and are chosen to reflect project effectiveness.

Immediately after project completion, it is important to compare relevant MOEs against those collected at project startup (baseline assessment) to assess changes associated with the project. Besides assessing change, this point in the assessment cycle is a good opportunity to assess important lessons learned that can be incorporated into subsequent projects. In some cases, these lessons learned may be the most important aspects of the immediate post-project assessment.

10. Communicate Results

After the data have been collected, they need to be analyzed, interpreted, and shared with collaborators and supervisors. In general, project assessment results will be of interest to the following (among others):

1. program beneficiaries and local leaders
2. the in-country HA project planner, overseer, or manager

3. the country team, especially USAID and relevant Department of State staff
4. the COCOM HA manager
5. the OSD policy HA representative
6. the Defense Security Cooperation Agency, which oversees all security cooperation programs, including OHDACA.

The format for the project reports should be established in advance and should communicate indicator information from the various worksheets. The box below provides a sample report outline. Items 1 through 7 will typically be completed during the project nomination phase. Revisions to this information can be made once a project is complete to more closely reflect what actually occurred. Items 8, 9, and 10 reflect collection of MOPs and MOEs at project start-up, during project execution, immediately after project completion, and one year later—all of which should be stored in OHASIS for easy report generation.

Project Follow-Up

11. Collect Outcome Indicators One Year After Project Is Completed, and Communicate Results

Outcome measures should be collected again one year after the project is completed to assess the sustainability of the results. At this point, the same outcome indicators (MOEs) measured at baseline and immediately after project completion should be collected and recorded again. The follow-up outcome measures also should be communicated as described in step 10. *Sustained* outcomes are important for the community and contribute to the achievement of broader strategic objectives. Thus, it is important to go back and remeasure outcomes of interest one year after project completion and, potentially at future points, to assess the sustainability of outcomes and related lessons learned.

Sample Report Outline

1. Project title
2. Project location: COCOM, country, project area (including GPS coordinates of the project)
3. Project start and completion dates
4. Total budget/expenditures
5. Introduction and background
 - Description of need
 - Description of context-specific circumstances that may affect outcomes
6. Project description
7. Project objectives
8. Assessment of project execution:
 - Completion of baseline, immediate post-project, and one-year post-project assessments
 - Assessment methods used
 - All MOPs, reflecting inputs, activities/processes, and outputs
 - Problems identified and how they were resolved (or why they were not)
9. Assessment of project outcomes:
 - All MOEs reflecting outcomes at baseline, upon project completion, and one year later
10. Conclusions/recommendations/lessons learned (to be completed by user).

Handing Off Projects

It is important to ensure continuity of HA projects and associated project assessment each time staff turns over. This section provides some suggestions for handing over a project to a DoD successor or other relevant agency that will follow up on project assessment (collecting and analyzing MOPs and MOEs for the HA project).

- Ongoing Projects
 - Provide information on the status of activities (e.g., How far along is the project?).
 - Summarize required resources to complete project assessments (e.g., How much time, manpower, or equipment will be needed to complete the assessment process?).
 - Discuss key collaborators and important community contacts (e.g., Has the project assessment successor been introduced to key contacts?).
 - Explain the project assessment plan (e.g., Have the important indicators and methods for collecting data been reviewed and explained, along with the timeline?).
 - Hand over all indicator worksheets and other relevant project and project assessment documentation.
- Completed Projects
 - Review all points discussed above for ongoing activities (e.g., Does the successor know exactly where to find data and reports for the completed project?).
 - Explain what is required for the one-year follow-up and discuss the follow-up assessment plan (e.g., Does the successor know what is involved, including when it should be conducted, which MOE indicators need to be collected and recorded, and how they can be compared to earlier measures of the same MOEs?).

Using the Indicator Worksheets

The following seven worksheets are designed to facilitate data collection and data entry. They can also be found in electronic format on the accompanying CD.

- Worksheet 1 presents the objective tree tool for use in analyzing the causes and effects related to proposed HA projects.
- Worksheet 2 presents project management indicators that are relevant to all projects.
- Worksheet 3 presents core indicators linked to DoD strategic objectives that are relevant to all projects.
- Worksheet 4 presents project-specific indicators for water and sanitation projects.
- Worksheet 5 presents indicators for health infrastructure projects.
- Worksheet 6 presents indicators for nonhealth infrastructure projects.
- Worksheet 7 presents indicators for health services projects.
- Worksheet 8 presents indicators for disaster-related projects.

Worksheets 2 through 8 have eight columns each. The first column in each worksheet contains a brief description of the indicator and whether it is an MOP or an MOE. It also provides a definition of the indicator or its calculation. If new indicators are developed or incorporated into a project assessment, a brief description of each should be entered in this column under the appropriate heading. The second column describes the method of collection or the

source of the data for the particular indicator. As mentioned previously, this has already been determined for some indicators. For other indicators, particularly those that are specific to a given project type, it will be necessary to enter the data source. The third column defines the response options for the indicator. Again, these response options are specified for many indicators but will need to be added for others based on the context of a specific project.

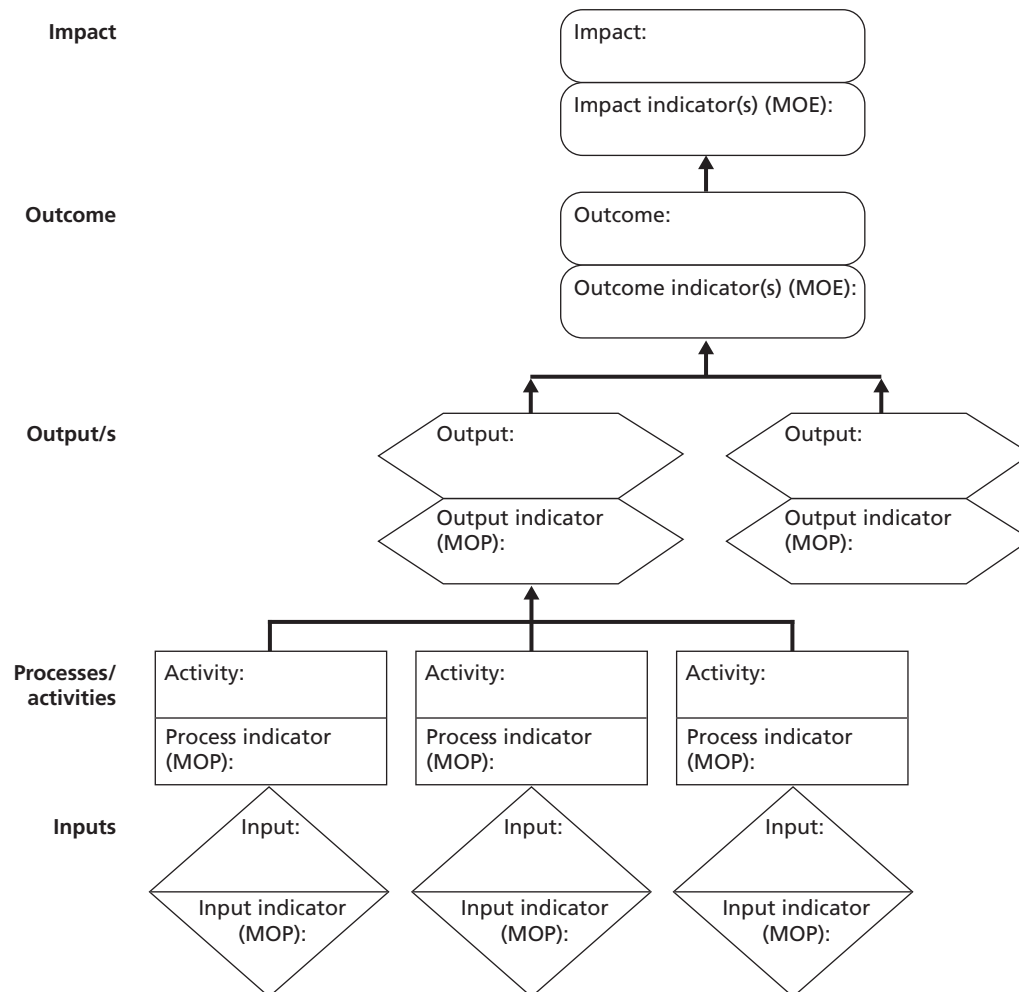
In Worksheet 2, the fourth column is intended for recording the name of the assigned data collector. In the case of multiple data collectors at one or more time points, a note should be made to that effect and additional documentation attached to the worksheet. In Worksheets 3 through 8, the fourth column is for the data source actually used (the second column lists the possible data source). For several indicators, there is more than one potential data source.

The fifth, sixth, and seventh columns in Worksheets 2 through 8 are used to record the value of the indicators at baseline (BL), immediately upon completion (IMM), and at the one-year follow-up (1YR). To facilitate data entry, when a particular indicator does not need to be recorded at a certain time point, that area of the worksheet is blacked out. The eighth column is intended for any notes related to the particular indicator. In cases in which responses require explanations, those should be entered here. When extenuating circumstances (e.g., natural disasters or political upheaval) have affected measurement of the indicator, that should be noted here as well.

When new indicators are needed for specific projects, follow the format presented in these worksheets. That is, when a scale or a special type of measurement is required, be sure to record that information in the notes section or in materials appended to the worksheet. When the materials are taken from specific sources, be sure to cite the source for future reference.

Worksheet 1

Objective Tree



Worksheet 2
Project Management Indicators

Indicator <i>(indicator family: MOP or MOE)</i>	Data Source	Response Options	Data Collector	Response Value for Specified Collection Time			Notes/Comments
				BL	IMM	1YR	
Project planning							
Project assessment plan developed before project execution <i>(MOP)</i>	Self-report	Y/N					
Post-project sustainment plan developed <i>(MOP)</i>	Self-report	Y/N					
Project timeline							
Project completed by original deadline <i>(MOP)</i>	Self-report	Y/N (if no, explain)					
Project budget							
Project completed within original budget <i>(MOP)</i>	Self-report	Y/N (if no, explain)					
Coordination across stakeholder agencies							
Project reviewed and discussed with relevant State Department officials and feedback incorporated <i>(MOP)</i>	Self-report	Y/N					
Project reviewed and discussed with relevant USAID officials (including Office of Foreign Disaster Assistance) and feedback incorporated <i>(MOP)</i>	Self-report	Y/N/NA					
Project reviewed and discussed with other relevant USG officials and feedback incorporated <i>(MOP)</i>	Self-report	Y/N/NA (specify)					
Project reviewed and discussed with other relevant agencies (indicate which and specify organizations in notes/ comments column) and feedback incorporated <i>(MOP)</i>							
International organizations	Self-report	Y/N/NA					
Other donor nations	Self-report	Y/N/NA					
Local and international NGOs	Self-report	Y/N/NA					
Relevant private-sector representatives	Self-report	Y/N/NA					
Third-party allied/coalition militaries	Self-report	Y/N/NA					

Worksheet 2—Continued

Indicator (<i>indicator family: MOP or MOE</i>)	Data Source	Response Options	Data Collector	Response Value for Specified Collection Time			Notes/Comments
				BL	IMM	1YR	
USAID provided financial, human, or in-kind resources (<i>MOP</i>)	Self-report	Y/N/NA					
Other USG counterpart (specify) provided financial, human, or in-kind resources (<i>MOP</i>)	Self-report	Y/N/NA					
Other USG counterpart (specify) agreed to sustain the project (<i>MOP</i>)	Self-report	Y/N/NA					
Host nation agreed to sustain the project (<i>MOP</i>)	Self-report	Y/N/NA					
Project troubleshooting							
Problems impeded project execution (<i>MOP</i>)	Self-report	Y/N (if yes, specify)					
Problems resolved satisfactorily (<i>MOP</i>)	Self-report	Y/N (if yes, explain how; if no, explain why)					
Project Assessment							
Project assessed with reference to stated objectives (<i>MOP</i>)	Self-report	Y/N					
Baseline assessment completed (<i>MOP</i>)	Self-report	Y/N, date completed					
Baseline assessment conducted with at least one community member (e.g., leader, supervisor) (<i>MOP</i>)	Self-report	Y/N/NA					
Immediate post-project assessment completed (<i>MOP</i>)	Self-report	Y/N, date completed					
Immediate post-project assessment conducted with at least one community member (<i>MOP</i>)	Self-report	Y/N/NA					
One-year post-project assessment completed (<i>MOP</i>)	Self-report	Y/N, date completed					

Worksheet 2—Continued

Indicator (<i>indicator family: MOP or MOE</i>)	Data Source	Response Options	Data Collector	Response Value for Specified Collection Time			Notes/Comments
				BL	IMM	1YR	
One-year post-project assessment conducted with at least one community member (<i>MOP</i>)	Self-report	Y/N/NA					
Additional post-project assessment completed (date/years post-completion) (<i>MOP</i>)	Self-report	Y/N/NA					

NOTE: BL = baseline. IMM = immediate.

Worksheet 3
Core Indicators

Indicator (<i>indicator family: MOP or MOE</i>)	Possible Data Source	Response Options	Data Source Used	Response Value for Specified Collection Time			Notes/Comments
				BL	IMM	1YR	
Capacity of host-nation civilians increased (if applicable)							
Project targets transfer of knowledge or skills from DoD to host-nation civilians (<i>MOP</i>)	Self-report	Y/N/NA					
Project implemented in collaboration with host-nation civilians (<i>MOP</i>)	Self-report	Y/N/NA					
Number of host-nation civilians trained during project execution (<i>MOP</i>)	Self-report	#					
Host-nation civilians operate and maintain project/property once project is completed (<i>MOE</i>)	Self-report	Likert scale 0–4					
Capacity of host-nation government (nonmilitary) increased (if applicable)							
Project targets transfer of knowledge or skills from DoD to host-nation government (<i>MOP</i>)	Self-report	Y/N/NA					
Project implemented in collaboration with host-nation government (nonmilitary) (<i>MOP</i>)	Self-report	Y/N/NA (specify)					
Number of host-nation government (nonmilitary) personnel trained during project execution (<i>MOP</i>)	Self-report	#					
Host-nation government (nonmilitary) operates and maintains project/property once project is completed (<i>MOE</i>)	Self-report	Likert scale 0–4					
Capacity of host-nation military increased for civilian benefit (if applicable)							
Project targets transfer of knowledge or skills from DoD to host-nation military (<i>MOP</i>)	Self-report	Y/N/NA					
Project implemented in collaboration with host-nation military (<i>MOP</i>)	Self-report	Y/N/NA (specify)					
Number of host-nation military personnel trained during project execution (<i>MOP</i>)	Self-report	#					
Host-nation military operates and maintains project/property once project is completed (<i>MOE</i>)	Self-report	Likert scale 0–4					

Worksheet 3—Continued

Indicator (<i>indicator family: MOP or MOE</i>)	Possible Data Source	Response Options	Data Source Used	Response Value for Specified Collection Time			Notes/Comments
				BL	IMM	1YR	
Project recognized as DoD/USG effort and received positively by the community							
Project sends a tangible signal in the host nation, regionally, and globally that DoD and USG respond to humanitarian needs and have an interest in the well-being of those in need (<i>MOP</i>)	Self-report	Y/N					
Project information recognizing both DoD and host nation is disseminated in local community (<i>MOP</i>)	Self-report	Y/N					
DoD or other USG representative present at the ribbon-cutting or other ceremony (<i>MOP</i>)	Self-report	Y/N/NA (specify)					
Project includes, where appropriate, some tangible, visible, or substantive marker (e.g., cornerstone, plaque, sign) of <i>both</i> DoD and host-nation involvement, with the host nation in the lead (<i>MOE</i>)	Self-report	Y/N/NA (describe)					
Extent to which local community feels project will improve quality of life (<i>MOE</i>)	Poll, local consultation	Likert scale 0–4					
Extent to which local community feels the project was responsive to local needs (<i>MOE</i>)	Poll, local consultation	Likert scale 0–4					
Degree of favorable impression of the United States (<i>MOE</i>)	Poll, local consultation	Likert scale 0–4					
Extent to which the project changed community opinion about the United States and whether it was in a positive or negative way (<i>MOE</i>)	Poll, local consultation	Likert scale 0–4 and pos/neg					
Cooperated with host-nation civilians (if applicable)							
Project developed in response to explicit host-nation civilian need or request (<i>MOP</i>)	Self-report	Y/N (specify organization[s])					
Project designed in coordination with host-nation civilians (<i>MOP</i>)	Self-report	Y/N (specify organization[s])					

Worksheet 3—Continued

Indicator (<i>indicator family: MOP or MOE</i>)	Possible Data Source	Response Options	Data Source Used	Response Value for Specified Collection Time			Notes/Comments
				BL	IMM	1YR	
Host-nation civilians provided information or financial, human, or in-kind resources for the project (<i>MOP</i>)	Self-report	Y/N/NA					
Cooperated with host-nation government (nonmilitary) (if applicable)							
Project developed in response to explicit host-nation (nonmilitary) need or request (<i>MOP</i>)	Self-report	Y/N (specify organization[s])					
Project designed in coordination with host-nation government (nonmilitary) official (<i>MOP</i>)	Self-report	Y/N (specify organization[s])					
Host nation provided information, financial, human, or in-kind resources for project (<i>MOP</i>)	Self-report	Y/N/NA					
Cooperated with host-nation military for civilian benefit (if applicable)							
Project developed in response to explicit host-nation military need or request (<i>MOP</i>)	Self-report	Y/N (specify organization[s])					
Project designed in coordination with host-nation military officials (<i>MOP</i>)	Self-report	Y/N (specify organization[s])					
Host-nation military provided information, financial, human, or in-kind resources (<i>MOP</i>)	Self-report	Y/N/NA					
Project enhanced host-nation government legitimacy in the eyes of the public							
At least one host-nation government official (military or nonmilitary) present at the groundbreaking or ribbon-cutting ceremony (<i>MOP</i>)	Self-report	Y/N					
Project outputs are operated, maintained, or managed by the host-nation government (military or nonmilitary) (<i>MOE</i>)	Self-report	Y/N/NA					

NOTE: BL = baseline. IMM = immediate.

Likert scale: 0 = not at all, 1 = small amount, 2 = medium amount, 3 = large amount, 4 = completely.

Worksheet 4
Indicators for Water and Sanitation Projects

Indicator (indicator family: MOP or MOE)	Possible Data Source	Response Options	Data Source Used	Response Value for Specified Collection Time			Notes/Comments
				BL	IMM	1YR	
Access to improved source of drinking water enhanced (if applicable)							
Number of potable water sources created (with locations indicated under “Notes/Comments”) (MOP)	Self-report, geocoded data	#					
Well built to relevant local (and international or national, as appropriate) standards (MOP)	Self-report	Y/N					
Well built in a way that enables local maintenance over time (MOP)	Site inspection	Likert scale 0–4					
Number of people obtaining water from source daily, divided by number of people living within 500 m or a 10-minute walk of safe drinking water source (MOE)	Site inspection, household survey	# (numerator), # (denominator), percentage					
Water quality enhanced (if applicable)							
Drinking water from source(s) created by project is nonturbid by inspection ^a (MOE)	Site inspection	Y/N					
Number of fecal coliforms per 100 ml at distribution point (MOE)	Chemical test	#					
Number of fecal coliforms per 100 ml at point of use (MOE)	Chemical test	#					
Access to excreta disposal facilities increased (if applicable) ^b							
Number of latrines dug or other excreta disposal facilities created (MOP)	Self-report	#					
Number of people using excreta disposal daily, divided by number of people living within 50 m of adequate excreta disposal (MOE)	Self-report	# (numerator), # (denominator), percentage					

Worksheet 4—Continued

Indicator (<i>indicator family: MOP or MOE</i>)	Possible Data Source	Response Options	Data Source Used	Response Value for Specified Collection Time			Notes/Comments
				BL	IMM	1YR	
Excreta disposal facility created meets relevant local (and international or national, as appropriate) standards of quality (<i>MOE</i>)	Self-report	Y/N					
Excreta disposal facility built in a way that enables local maintenance over time (<i>MOP</i>)	Site inspection	Likert scale 0–4					
Community members' skills in water/sanitation maintenance improved							
Number of community members trained in water pump or latrine/excreta disposal maintenance (<i>MOP</i>)	Self-report	#					
Number of community members trained to monitor water quality (<i>MOP</i>)	Self-report	#					
Trained community member(s) maintain water pump or latrine as required (<i>MOE</i>)	Site inspection	Likert scale 0–4					
Trained community member(s) monitor water quality as required (<i>MOE</i>)	Site inspection	Likert scale 0–4					

NOTE: BL = baseline. IMM = immediate.

Likert scale: 0 = not at all, 1 = small amount, 2 = medium amount, 3 = large amount, 4 = completely.

^a Nonturbid: Clear, not cloudy, could read a book or newspaper through a tube of water.

^b For other types of sanitation projects, such as solid waste disposal or community drainage, other indicators will be required, see the section “Choosing or Developing Additional Indicators to Fill Project-Specific Assessment Gaps” in Chapter Three of the M&E Primer (Part I of this handbook).

Worksheet 5
Indicators for Health Infrastructure Projects

Indicator (<i>indicator family: MOP or MOE</i>)	Possible Data Source	Response Options	Data Source Used	Response Value for Specified Collection Time			Notes/Comments
				BL	IMM	1YR	
Health care infrastructure improved							
Clinic is built or renovation complete (<i>MOP</i>)	Self-report	Y/N					
New or renovated facility meets relevant local (and international or national, as appropriate) building codes or standards (<i>MOP</i>)	Site inspection	Y/N					
Facility built in a way that enables local maintenance over time (<i>MOP</i>)	Site inspection	Likert scale 0–4					
Clinic is open and being used as intended (<i>MOE</i>)	Site inspection, records	Likert scale 0–4					
Number of people using the new or renovated facility, divided by number of people living within 5 km or 1 hour of the facility (<i>MOE</i>)	Site inspection, records	# (numerator), # (denominator), percentage					
Community members' skills improved							
Number of community members trained in construction through the project (<i>MOP</i>)	Self-report	#					

NOTE: BL = baseline. IMM = immediate.

Likert scale: 0 = not at all, 1 = small amount, 2 = medium amount, 3 = large amount, 4 = completely.

Worksheet 6
Indicators for Nonhealth Infrastructure Projects

Indicator (<i>indicator family: MOP or MOE</i>)	Possible Data Source	Response Options	Data Source Used	Response Value for Specified Collection Time			Notes/Comments
				BL	IMM	1YR	
Community infrastructure improved							
Facility is built or renovation complete (<i>MOP</i>)	Self-report	Y/N					
New or renovated facility meets relevant local (and international or national as appropriate) building codes (<i>MOP</i>)	Site inspection	Y/N					
Facility built in a way that enables local maintenance over time (<i>MOP</i>)	Site inspection	Likert scale 0–4					
Facility is open and being used as intended (<i>MOE</i>)	Site visit, records	Likert scale 0–4					
Number of people using the new or renovated facility, divided by the number of people living within 5 km or 1 hour of facility ^a (<i>MOE</i>)	Site visit, records	# (numerator), # (denominator), percentage					
Community members' skills improved							
Number of community members trained in construction through the project (<i>MOP</i>)	Self-report	#					

NOTE: BL = baseline. IMM = immediate.

Likert scale: 0 = not at all, 1 = small amount, 2 = medium amount, 3 = large amount, 4 = completely.

^a Relevant to facilities serving the public, such as schools, food distribution centers, women's centers, or community centers.

Worksheet 7
Indicators for Health Services Projects

Indicator (<i>indicator family: MOP or MOE</i>)	Possible Data Source	Response Options	Data Source Used	Response Value for Specified Collection Time			Notes/Comments
				BL	IMM	1YR	
Access to essential health services increased							
Health services provided are the most appropriate and effective available in the country, appropriate for the level of facility (<i>MOE</i>)	Site survey	Likert scale 0–4					
Percentage of community members with access to the health services within 5 km or 1 hour travel time (<i>MOE</i>)	Site inspection	Percentage					
Number of persons receiving services in past month (<i>MOE</i>)	Facility records	#					
Referral system is in place and operates effectively (<i>MOE</i>)	Site inspection, records	Likert scale 0–4					
Community capacity to provide health care services improved							
Local health workers are integrated into the service provision to the extent possible, accounting for gender and ethnic balance (<i>MOE</i>)	Self-report, local consultation	Likert scale 0–4					
Ratio of health care providers to population: Number of trained health care providers at the project-related facility or facilities <i>divided by</i> population size <i>multiplied by</i> 100,000 = ratio of providers per 100,000 population (<i>MOE</i>)	Records	#/100,000					

NOTE: BL = baseline. IMM = immediate.

Likert scale: 0 = not at all, 1 = small amount, 2 = medium amount, 3 = large amount, 4 = completely.

Worksheet 8
Indicators for Disaster-Related Projects

Indicator <i>(indicator family: MOP or MOE)</i>	Possible Data Source	Response Options	Data Source Used	Response Value for Specified Collection Time			Notes/Comments
				BL	IMM	1YR	
Disaster preparedness improved							
Major disaster risks determined <i>(MOP)</i>	Self-report	Y/N/NA					
Areas most at risk determined <i>(MOP)</i>	Self-report	Y/N/NA					
Disaster response plan developed <i>(MOP)</i>	Self-report	Y/N/NA					
Number of structures rebuilt, relocated, or retrofitted to be disaster resistant <i>(MOP)</i>	Site inspection	#					
Disaster-resistant structures located in places to best avoid or withstand disaster <i>(MOP)</i>	Site inspection	Y/N/NA					
Number of structures (e.g., hospitals, schools) with sufficient backup water and power <i>(MOE)</i>	Site inspection	#					
Disaster response effectively coordinated							
There is effective coordination and exchange of information among those affected by or involved in the disaster response <i>(MOP)</i>	Site inspection	Likert scale 0–4					
Disaster recovery achieved							
Contact, trade, and transport reestablished between disaster-affected rural areas and markets for products, labor, and services <i>(MOE)</i>	Site inspection, records	Likert scale 0–4					
Disaster-related capacity improved							
Project fills previously identified gap in disaster management (i.e., preparedness, response, recovery) <i>(MOP)</i>	Self-report	Likert scale 0–4					
Disaster response plan developed in collaboration with relevant local project personnel or community volunteers <i>(MOP)</i>	Self-report	Y/N/NA					
Number of personnel or volunteers trained to implement community disaster response plan <i>(MOP)</i>	Self-report	#					

Worksheet 8—Continued

Indicator (<i>indicator family: MOP or MOE</i>)	Possible Data Source	Response Options	Data Source Used	Response Value for Specified Collection Time			Notes/Comments
				BL	IMM	1YR	
Number of personnel or volunteers trained to maintain disaster-resistant structures in the community (<i>MOP</i>)	Self-report	#					
Trained personnel or volunteers maintain disaster-resistant structures, as required (<i>MOE</i>)	Site inspection	Likert scale 0–4					

NOTE: BL = baseline. IMM = immediate.
 Likert scale: 0 = not at all, 1 = small amount, 2 = medium amount, 3 = large amount, 4 = completely.

Guide to Community Consultation

The following tips from USAID outline good practices for consulting with the community for purposes of project planning, execution, and assessment.¹

1. *Consult with relevant U.S. government staff in country.*
Meet with relevant USAID program officer(s) and Department of State refugee coordinator, if relevant, to
 - discuss the OHDACA program and the specific proposed project
 - ensure that the project meets unmet needs with no duplication of effort
 - coordinate field visits
 - understand sensitivities among the population and HA community regarding DoD's HA activities.

After consultations with USG agencies, consult with relevant persons from the host nation, UN agencies, and NGOs to discuss these same issues.

2. *Select the community consultation team.*
The team should include, at minimum, a facilitator and a note-taker. The facilitator should be a native speaker with good skills in leading group discussions. The facilitator should also have reasonable knowledge of the local area. Sometimes, it is important for the facilitator to be of the same gender as participants. This may be possible for individual interviews but less practical for group discussions unless such discussions are organized by gender.
3. *Identify the participants for each consultation discussion.*
Based on knowledge of the local situation and on previous consultations, identify the individuals, groups, and institutions that should be represented. One of the best approaches is to consult several key informants. For example, talk to NGOs working in the area, to USAID and other USG agencies, or to someone at a relevant local university who is familiar with the situation. Consulting several informants will help avoid bias and ensure that the correct individuals have been identified.
 - Some issues to consider when choosing representatives for inclusion in the discussion are whether it is important to involve community leaders (both secular and religious), government and nongovernmental organizations, individuals of various ages (as relevant for the particular project), both women and men, those considered to be more and

¹ Adapted from U.S. Agency for International Development, 1996.

- less powerful in the community, or all relevant ethnic groups. In some cases, several group consultations will be necessary to gain the required feedback.
- Each group consultation or discussion should include no more than seven to 11 people, to allow the smooth flow of conversation.
- Participants in each group should be fairly homogeneous to facilitate discussion. Women tend to defer to men. In ethnic conflicts, certain groups may not be comfortable together.

4. *Determine timing and location.*

Consultations should last no more than one to two hours and should be conducted in a convenient location with some degree of privacy. Consultations in village squares may draw attention and uninvited guests. Consultations in difficult-to-reach location or “elite”-feeling locations, such as hotels, may keep some individuals from participating.

5. *Specify the goals of the consultation.*

What specifically should be learned in this consultation? Some possible goals might be

- finding out what types of activities the community members need or want
- having community members provide their opinion on which of two or more possible projects is more relevant (i.e., having them help choose between an elementary school and a vocational school)
- getting their help in determining the best location for the project
- asking their opinion of the best time to start the project
- gauging the extent to which the community is willing to participate and what the population might be willing to do.

If necessary, clarify that the consultation concerns a very focused and limited project to be funded by USG. Unrealistically high expectations on the part of the community will ultimately result in disappointment, regardless of the project chosen. Explain whether it will be a one-time project or whether it is the first of several. Staff turnover is often high, so be very careful not to promise something that a different team may not be able to deliver.

6. *Manage the flow of the consultation.*

People may not know what to expect from a discussion of this type. First, clarify the reason for the consultation and tell participants that it is an informal discussion in which everyone is expected and encouraged to participate, especially if they have divergent views. During the discussion, be careful about using “why” questions, which can put people on the defensive and cause them to give politically correct or polite answers. Instead, use probing techniques to get a fuller picture:

- Repeat the question to give the participant more time to think.
- Pause after an answer; be patient and wait for a response. A thoughtful nod or expectant look can convey that you want a fuller answer.
- Repeat the reply; sometimes, this stimulates conversation.
- Ask “when,” “what,” “where,” and “which” questions to get more detailed information from participants.
 - When is the best time to start construction on the well?

- What might happen if construction were delayed for some reason?
 - Where do you think the well should be located?
 - Which neighborhoods would benefit the most from the well being dug there?
- Use neutral questions (e.g., “Anything else?”) to get more information.

Sometimes it is important to take control of the discussion. In most groups, a few individuals tend to dominate the discussion. However, there are ways to balance out participation:

- Address questions to those who are reluctant to talk.
- Give nonverbal cues. For example, look in another direction when someone talks for an extended period. This is a sign that you would like them to wrap up their comments.
- If necessary, intervene, politely summarize the point, then refocus the discussion.
- Take advantage of natural pauses. Say, “Thank you for that interesting idea,” and move on.

Minimize the effects of group pressure. When an idea is adopted by the group without any general discussion or disagreement, it is likely the result of group pressure. If this happens, probe for more details or alternate views.

7. *Analyze results.*

After each interview, summarize the information gathered from the discussion and the team’s impressions of the discussion in relation to the project or activity being considered. After all consultations have been completed, review all the information, analyze patterns and trends, and use that information to help identify options for projects and activities in the context of relevant guidance and the appropriate campaign plans.

Avoiding Bias

This appendix provides more detail on the different kinds of bias that may arise during project assessment. Understanding these sources of bias will help planners avoid them.

Researcher Bias

Every individual who collects qualitative and quantitative data will view things slightly differently. A physician measuring the effectiveness of a water and sanitation project would be more likely to consider waterborne illness and might focus heavily on that set of indicators. An engineer might focus on the amount of water made available via the pump. It is useful for more than one person to conduct the important parts of the assessment to offset this type of bias by presenting differing viewpoints of the same project.

Researchers may also feel more comfortable speaking to a particular segment of the population, based on gender, ethnicity, language skills, and so on. It is important to work against that “comfort-based” bias as much as possible. When working with local researchers as evaluation partners, consider the extent to which consultants, university professors, and even graduate students are elites and may not communicate well with villagers. Also watch for systematic distortion of results, or bias, related to gender, since consultants or university professors are likely to be men and may prefer to speak with men.

Informant Bias

The people that provide input for polls, surveys, focus groups, interviews, and most other data-collection approaches used for project assessment also bring their own biases into the processes. Women, who are the primary visitors to a well, will likely have a very different perspective on the well’s utility to the village than would men. This is true across a number of segments. It is important to gather input from each of the important segments of the population to make sure that the data are as representative of the entire community as possible.

1. *Gender bias:* The perspectives of women differ from those of men in some circumstances.
2. *Age bias:* The perspectives of children or the elderly may differ from those of adults in some circumstances.
3. *Ethnic bias:* Certain ethnic groups, particularly minorities, may have different perspectives.

4. *Spatial bias*: The opinions of people who live closer to the project differ from those who are more remote. Opinions in cities may be different from opinions in rural areas.
5. *Wealth bias*: Opinions of the wealthy or powerful may differ from those of the middle class, which, in turn, may differ from those of the poor.
6. *Education bias*: Perspectives may differ between people with more or less education. Further, because those with more education may be better able to communicate, their views may be easier to understand.
7. *Expectation bias*: A respondent's expectations about what the project team could have done compared to what it did may affect perspectives. For example, a villager may believe that the United States' vast wealth means that it should have built an entirely new hospital rather than refurbishing an existing clinic in a village.
8. *Disciplinary bias*: The perspective of a village doctor may differ from that of a village farmer, for example.
9. *Insider-outsider bias*: Perspectives may differ between those who are well integrated into the community and those who are peripheral to the community. This may be related to ethnicity, religion, language, citizenship, or other characteristics.

Bias Related to Tools and Techniques Used to Gather Data

Survey data may provide a very different picture compared with interview or focus group data. Surveys, because they focus on asking many easy-to-answer questions, may provide data that are more “shallow” than would be the case in an in-depth interview with an individual. Further, focus groups, because they involve groups of people, can often encourage people to report what they believe community members would like to hear rather than their personal opinions. Each approach is useful for different goals; combined, they provide a better overall picture of project results.

When the data are collected may also have an effect. The time of the year and the time of day become important, depending on the work schedules and livelihoods of community members. Farmers may not have much time to spare while planting or harvesting; in a village populated largely by farmers, data collected at that time may be less reliable.

Finally, bias may be introduced when people change behaviors of interest merely because they are being studied. This is called *observation bias*, or the “Hawthorne effect.”¹

¹ The term *Hawthorne effect* was coined in the 1950s by Henry Landsberger, who was analyzing experiments on worker productivity at the Hawthorne Works (a Western Electric factory). His analysis showed that improvements in productivity resulting from changes in working conditions disappeared when the study was completed, suggesting that the productivity gains were attributable to the interest in the workers being shown by the study team rather than the actual changes to the working conditions.

Monitoring and Evaluation Terms

While the list is not exhaustive, this glossary provides a more complete set of important M&E terms based on glossaries or dictionaries developed by the Department of State, the United Nations, USAID, and others. The glossary presents relevant definitions and the sources for each definition.

Term	Definition
Activity	<p>1. An action or process undertaken over a specific period to convert resources to products or services to achieve results.^a</p> <p>2. Actions undertaken or work performed through which inputs, such as funds, technical assistance, or other types of resources are mobilized to produce specific outputs.^b</p> <p>Related Terms: project, development intervention</p>
Assessment	A process (which may or may not be systematic) of gathering information, analyzing it, and making a judgment based on the information. ^c
Baseline	<p>Information collected before or at the start of a project or program that provides a basis for planning or assessing subsequent progress and impact.^a</p> <p>Related term: benchmark</p>
Benchmark	<p>1. A standard against which results are measured.^a</p> <p>2. Reference point or standard against which performance or achievements can be compared. A benchmark might refer to what has been achieved in the past, e.g., by comparable organizations, or what could reasonably have been achieved under the circumstances.^c</p> <p>Related term: baseline</p>
Data	Information collected by a researcher. Data gathered during an evaluation are manipulated and analyzed to yield findings that serve as the basis for conclusions and recommendations. ^a
Effect	<p>Intended or unintended change that results directly or indirectly from an intervention.^a</p> <p>Related terms: result, outcome, impact</p>
Effectiveness	<p>1. The extent to which an intervention has attained its major relevant objectives.^a</p> <p>2. The extent to which the intervention's objectives were achieved or are expected to be achieved, taking into account their relative importance. Effectiveness is also used as an aggregate measure of (or judgment about) the merit or worth of an activity (i.e., the extent to which an intervention has attained or is expected to attain its major relevant objectives efficiently, in a sustainable fashion, and with a positive institutional development impact).^b</p>
End state	The set of required conditions that define achievement of the commander's objectives. ^d

Term	Definition
Evaluation	<p>1. A systematic and objective assessment of an ongoing or completed project, program, or policy. Evaluations are undertaken to (a) improve the performance of existing interventions or policies, (b) assess their effects and impacts, and (c) inform decisions about future programming. Evaluations are formal analytical endeavors involving systematic collection and analysis of qualitative and quantitative information.^a</p> <p>2. The systematic and objective assessment of an ongoing or completed project, program, or policy; its design; its implementation; and results. The aim is to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact, and sustainability. An evaluation should provide information that is credible and useful, promoting the incorporation of lessons learned into the decisionmaking process of both recipients and donors. Also refers to the process of determining the worth or significance of an activity, policy, or program. May involve defining appropriate standards, examining performance against those standards, assessing actual and expected results, and identifying relevant lessons.^b</p> <p>Related terms: assessment, review</p>
Feedback	<p>The transmission of evaluation findings to parties for whom it is relevant and useful so as to facilitate learning. This may involve the collection and dissemination of findings, conclusions, recommendations, and lessons learned from experience. In the context of evaluation, this may mean sharing the evaluation results with those who participated in the evaluation.^c</p>
Goal	<p>The higher-order objective to which a project, program, or policy is intended to contribute.^a</p> <p>Related term: objective</p>
Impact	<p>1. A result or effect that is caused by or attributable to a project or program. Often used to refer to the higher-level effects of a program in the medium or long term and can be intended or unintended, positive or negative.^a</p> <p>2. The overall effect of achieving specific results. In some situations, it includes changes—planned or unplanned, positive or negative, direct or indirect, primary or secondary—that a program or project helped to bring about. In others, it could also connote the maintenance of a current condition, assuming that the condition is favorable. Impact is the longer-term or ultimate effect attributable to a program or project, in contrast to outputs or expected accomplishments, which are shorter-term effects.^e</p> <p>Related terms: effect, evaluation</p>
Impact evaluation	<p>Specific measures that assess the extent to which a project accomplished its stated goals and objectives. Also called impact, outcome, or summative evaluation. Impact evaluations focus on the end results of projects. Questions may include “What is the result of the activities undertaken by the project?” “What happened to the target population as a result of those activities? Was it the expected outcome?” “Should different activities be substituted?” To measure the project’s effectiveness, questions may include “Was the project cost effective?” or “What would have happened to the priority group in the absence of the project?”^f</p> <p><i>Note that impact evaluation is frequently based on an experimental design, such as a randomized control trial, to more confidently infer a cause-effect relationship between program interventions and observed outcomes.</i></p>
Indicator	<p>1. A quantitative or qualitative variable that provides a reliable means to measure a particular phenomenon or attribute.^a</p> <p>2. Quantitative or qualitative factor or variable that provides a simple, reliable basis for assessing achievement, change, or performance. A unit of information measured over time that can help show changes in a specific condition. A given goal or objective can have multiple indicators.^c</p> <p>Related term: metric</p>
Indirect effect	<p>The unplanned changes brought about as a result of the intervention.^c</p>

Term	Definition
Inputs	<p>1. Resources provided for program implementation. Examples include money, staff, time, facilities, equipment, and plans.^c</p> <p>2. The financial, human, material, technological, and information resources provided by stakeholders (i.e., donors, program implementers, and beneficiaries) that are used to implement a development intervention.⁹</p>
Lessons learned	<p>1. Generalizations based on an evaluation that abstracts project-specific findings to apply to broader situations. Frequently, lessons highlight strengths or weaknesses in preparation, design, and implementation that affect performance, outcome, and impact.^a</p> <p>2. Learning from experience that is applicable to a generic situation rather than a specific circumstance. The identification of lessons learned relies on three key factors: the accumulation of past experiences and insights, good data collection instruments, and context analysis.⁹</p> <p>Related term: best practice</p>
M&E	See "Monitoring and evaluation."
Measure of effectiveness (MOE)	<p>A criterion used to assess changes in system behavior, capability, or operational environment that is tied to measuring the attainment of an end state, achievement of an objective, or creation of an effect.^d</p> <p>Related terms: combat assessment, mission</p>
Measure of performance (MOP)	A criterion used to assess friendly actions tied to measuring task accomplishment. ^d
Metric	A standard of measurement. ^h
MOE	See "Measure of effectiveness."
Monitoring	<p>1. The collection and analysis of routine measurements to detect changes in status. It is used to inform managers about the progress of an ongoing intervention or program and to detect problems that may be addressed through corrective action.^a</p> <p>2. The regular collection and analysis of information to assist in timely decisionmaking, ensure accountability, and provide the basis for evaluation and learning. It is a continuing function that uses methodical data collection to provide program or project managers and stakeholders with early indications of progress and achievement of objectives.^c</p>
Monitoring and evaluation (M&E)	The combination of monitoring and evaluation that provides the knowledge required for effective project management and reporting and accountability. ^c
Monitoring and evaluation (M&E) plan	An overall framework to ensure that M&E outputs make a valuable contribution to project decisionmaking and learning. The plan presents the necessary supporting conditions, skills, performance and learning questions, information-gathering requirements (including indicators), resources, and activities for planning, information gathering, analysis, synthesis, and reporting processes. ^c
MOP	See "Measure of performance."
Objective	<p>1. The clearly defined, decisive, and attainable goal toward which every operation is directed.ⁱ</p> <p>2. The specific target of the action taken (for example, terrain, an enemy force, or an enemy capability).ⁱ</p> <p>3. A specific statement detailing the desired accomplishments or outcomes of a project at different levels (short to long term). A good objective meets the criteria of being impact-oriented, measurable, time-limited, specific, and practical. Objectives can be arranged in a hierarchy.^c</p> <p>Related term: target</p>

Term	Definition
Outcome	<p>1. A result or effect that is caused by or attributable to a project, program or policy. Often used to refer to more immediate and intended effects.^a</p> <p>2. The intended or achieved short- and medium-term effects of an intervention's outputs, usually requiring the collective effort of partners. Outcomes represent changes in development conditions that occur between the completion of outputs and the achievement of impact.^g</p> <p>Related terms: effect, impact, output, result</p>
Outputs	<p>1. The products, goods, and services that result from an intervention.^g</p> <p>2. A final product or service delivered by a program or project to beneficiaries, such as goods, services, training, or facilities that a program is expected to produce to achieve its expected objectives.^e</p>
Performance	Degree to which a development intervention or development partner operates according to specific criteria, standards, or guidelines or achieves results in accordance with stated goals or plans. ^b
Performance or process indicator	<p>1. A particular characteristic or dimension used to measure intended changes. Performance indicators are used to observe progress and measure actual results against expected results.^a</p> <p>2. Specific statistics chosen because they provide valid, practical, and comparable measures of progress or indicate the level of change toward achieving expected results in a given period. Used to measure the extent to which goals have been achieved. Indicators correspond to the expected accomplishment and are used to measure performance. One expected accomplishment can have multiple indicators.^e</p> <p>Related terms: achievement indicator, expected accomplishment, performance measure</p>
Performance measurement	<p>1. Ways to objectively measure a program's degree of success in achieving its stated objectives, goals, and planned program activities.^a</p> <p>2. A system for assessing the performance of development interventions, partnerships, or policy reforms relative to planned outputs and outcomes. Performance measurement relies on the collection, analysis, interpretation, and reporting of data on performance indicators.^g</p>
Performance monitoring	A continuous process of collecting and analyzing data to compare how well a project, program, or policy is being implemented against expected results. ^b
Program	<p>1. A set of interventions, activities, or projects that are typically implemented by several parties over a specified period and may cut across sectors, themes, or geographic areas.^a</p> <p>2. A time-bound intervention similar to a project but that cuts across sectors, themes, or geographic areas; uses a multidisciplinary approach; involves multiple institutions; and may be supported by several different funding sources.^c</p>
Project	<p>1. A discrete activity (or "development intervention") implemented by a defined set of implementers and designed to achieve specific objectives with specified resources and implementation schedules. A set of projects make up the portfolio of a program.^a</p> <p>2. An intervention that consists of a set of planned, interrelated activities designed to achieve defined objectives within a given budget and specified period.^c</p> <p>Related terms: activity, intervention</p>
Project evaluation	<p>Evaluation of an individual project designed to achieve specific objectives with specified resources, in a specified time span, and following an established plan of action, often within the framework of a broader program.^e</p> <p>Related term: evaluation</p>
Project or program objective	The intended physical, financial, institutional, social, environmental, or other development results to which a project or program is expected to contribute. Also referred to as a project or program's "purpose." ^b

Term	Definition
Proxy indicator	1. Indicators that show indirectly whether a result has been achieved. Used when it is difficult to identify direct indicators to measure the result. ^e 2. A variable used to stand in for one that is difficult to measure directly. ^g
Result	1. The intended (or unintended) output, outcome, or impact. ^a 2. The measurable output, outcome, or impact (intended or unintended, positive or negative) of a development intervention. ^c
Standard	1. Something considered by an authority or by general consent as a basis of comparison. ^h 2. An approved model, rule, or principle that is used as a basis for judgment. ^h
Target	1. A specified result, often expressed by a value of an indicator, that a project, program, or policy is intended to achieve. ^a 2. A specified objective that indicates the number, timing, and location of what is to be achieved. ^e

NOTE: Definitions are paraphrased.

^a U.S. Agency for International Development, 2009.

^b Organisation for Economic Co-Operation and Development, 2002.

^c International Fund for Agricultural Development, 2002.

^d U.S. Joint Chiefs of Staff, 2008.

^e United Nations Monitoring, Evaluation and Consulting Division, 2006.

^f CORE Group Social and Behavioral Change Working Group, *Glossary of Monitoring and Evaluation Terms*, 2008.

^g United Nations Population Fund, 2004.

^h *Webster's Third New International Dictionary of the English Language*, Unabridged, Springfield, Mass., 1981.

ⁱ U.S. Joint Chiefs of Staff, *Joint Operation Planning*, Washington, D.C., Joint Publication 5-0, December 26, 2006.

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